DOCUMENT RESUME

ED 231 474 JC 830 322

AUTHOR Ramey, Luellen
TITLE Assessment Procedures for Students Entering Florida Community Colleges: Theory and Practice.
INSTITUTION Florida Community Junior Coll. Inter-institutional Research Council, Gainesville.
PUB DATE Mar 81
NOTE 151p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS Administrator Attitudes; *Community Colleges; *Educational Diagnosis; Literature Reviews; Measures (Individuals); Program Administration; Questionnaires; State Standards; State Surveys; *Student Evaluation; *Testing Programs; Two Year Colleges
IDENTIFIERS *Florida

ABSTRACT

Student assessment programs in Florida's community and junior colleges are described in this report in terms of theory, practice, and policy. Following introductory material on the background and purpose of the study, which involved statewide surveys of coordinators of student assessment programs, an extensive literature review is presented. The review covers topics such as the history and philosophical foundations of community colleges, the development of student assessment in these institutions, competency-based education and testing, and student advisement and counseling. Next, study procedures, which included a survey to gather data on current assessment programs, practices, and policies, and a separate survey to solicit coordinators' opinions, are described. Study findings are then presented for both surveys, including information on subject areas assessed; administration of assessment instruments; selective admissions programs and entrance criteria; assessment costs; primary assessment instruments for reading comprehension, English writing ability, English usage, and mathematics skills; student groups assessed; primary assessment instrument selection; factors determining cutoff scores for placement; and additional instruments used. The final section provides a summary of the status of student assessment programs in Florida. The survey instruments are appended. (LL)

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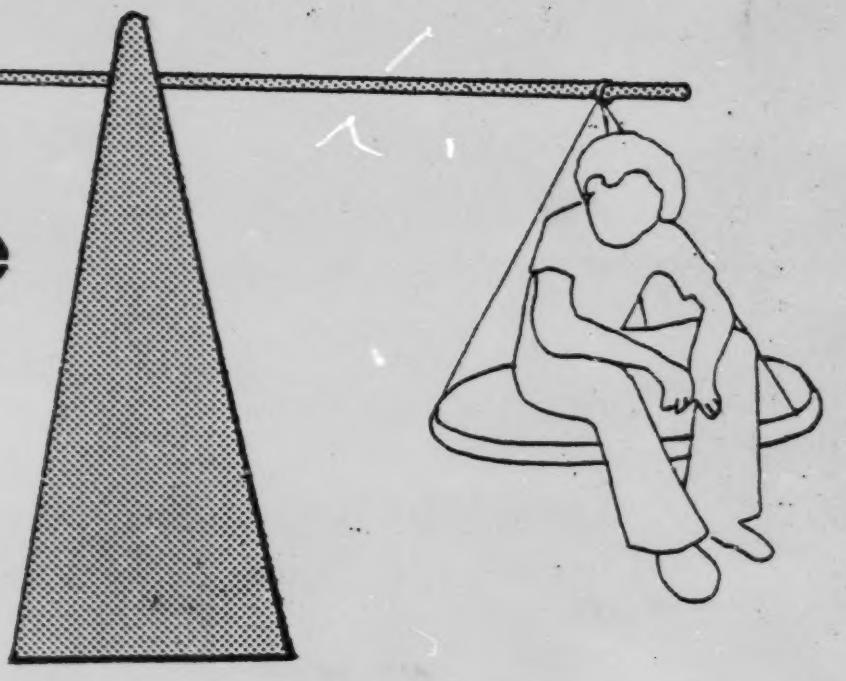
Assessment Procedures For Students Entering Florida Community Colleges:

Theory and Practice



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ASSESSMENT PROCEDURES FOR STUDENTS ENTERING FLORIDA COMMUNITY COLLEGES: THEORY AND PRACTICE

BY

LUELLEN RAMEY

Florida Community Junior College
Inter-Institutional Research Council

University of Florida
Gainesville, Florida

March 1981

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INTRODUCTION AND PURPOSE

The decade of the 1980's has produced for community and junior colleges tighter budgets, public accountability demands, further declines in standardized test scores, and a change to a more conservative political climate. These factors have combined to bring about an emphasis at both the state and the national level on the attainment of minimum competencies in educational programs. A brief history of the competency-based movement in Florida provides the foundation for understanding the origin and intent of recent Florida legislative mandates for community college assessment.

Florida has been committed to educational accountability since the late sixties (Fisher, 1978). The state began developing programs and laws when various reports and special study groups revealed a lack of data about school effectiveness. Florida lawmakers, educators, and the Department of Education staff adjusted the educational accountability statutes from session to session as they struggled to create a workable system. The House of Representatives reviewed the accountability programs

during late 1975 and early 1976. Under the leadership of the House Education Committee, the staff conducted a full investigation of the accountability laws, with particular emphasis on statewide assessment.

Meanwhile, key members of the Senate Education Committee were becoming deeply interested in the quality of education Florida students were receiving. They were concerned because students were being promoted and graduated from school without minimal reading, writing, and arithmetic skills. When the House and Senate interests came together in conference committees, the 1976 Educational Accountability Act resulted and was passed unanimously (Fisher, 1978).

The 1976 act mandated new minimum graduation standards for the class of 1978-79--specifically, the accumulation of a minimum number of course credits as required by the local district, mastery of the basic skills, and satisfactory performance on functional literacy tests (Laws Relating to Florida Public Education Enacted by the 1976 Legislature, 1976). It was decided that the Florida Statewide Assessment Program would become the focal point for determining student mastery of the basic skills and functional literacy. The program had previously tested all public school students in grades 3 and 5, but the new act expanded it to grades 3, 5, 8, and 11.

A decision was made to split the grade 11 assessment program into two components. The first would be a preliminary screening device, while the second would be a test of functional literacy. Students would be expected to pass "The Test" within four tries or receive a certificate of attendance rather than a diploma. Twenty-four skills were measured in the functional literacy component --13 in mathematics and 11 in communication skills (Fisher, 1978; Graves, 1978). It was hoped that minimum-competency tests would help guarantee that students would no longer automatically pass through schools simply on the basis of social promotion. Legislators and educators tried to ensure that in return for the time spent in schools, students would be guaranteed some minimum amount of learning in terms either of "school skills" or "life competencies" (Haney & Madaus, 1978). Yet this enthusiasm for competency testing poses a contradiction because it comes just at a time when various questions are being raised about, and criticisms leveled against, tests and the uses of tests, such as those addressed by Houts (1977).

This concern about the outcomes of education to higher education was expanded by 1979 Florida Statute, Chapter 79-222. The statute instructs the State Board of Education

> to adopt for public universities and from time to time modify minimum standards of college-level communication and computation skills

> generally associated with successful performance . . . and to approve tests and other assessment procedures which measure student achievement of those skills.(Section 107, subsection (2) of section 229.053)

There is particular interest in community college outcomes since the historical philosophy of the community colleges has been one of an "open door policy" of admission as well as an historical commitment to remediation (Cross, 1971; Knoell, 1966; Kaster, 1979; Medsker & Tillery, 1971; Rippey & Roueche, 1977; Roueche, Baker, & Brownell, 1971.) Remediation, however, is quite costly. At a time of increasing inflation, an erratic economy, higher educational costs, and competing demands for other public services, the gap between community college philosophy and practical reality widens.

Although Florida has expanded elementary and secondary assessment with the 1976 Accountability Act, the Florida Legislature is concerned about the extensive need which still exists for the funding of developmental/remedial programs for community college students. Grant and Hoeber (1978) caution that attempting to account for the existence of developmental/remedial or basic skills programs in postsecondary education is not merely a matter of claiming that students are less well prepared. Those institutions which have gone to open admissions have found it necessary to equalize more than just access

to college. Thus, changes in institutional policy have necessitated a change in curriculum, and basic skills programs have come into existence. Recognition that the open door could quickly become the revolving door for a high-risk student has caused institutions to move toward the establishment of developmental or basic skills programs.

A need for effective assessment programs at community and junior colleges arises from the diversity of entering students. The skill levels of community college student bodies vary between geographical areas, and a wide range of student abilities may be present in any one community college. Therefore, it becomes imperative that community colleges have an effective assessment program for placement purposes--in order to separate entering students into those who need general remedial work, those who should enter the regular sequences of programs, and those who should be allowed to exempt certain first-level courses in the sequence. Evaluating institutional effectiveness and relating that effectiveness to program costs has also become a use of assessment data.

The purpose of this study was to analyze entering student assessment programs in Florida's community and

junior colleges in terms of theory, practice, and policy. The study addressed the following:

1. What are the objectives of entering student assessment programs? What should the objectives be?

2. Who decides what entering student assessment programs are composed of? Who should decide?

3. What procedures are a part of entering student assessment programs? What procedures should be a part?

4. How are the results of assessment used? How should the results be used?

5. How are entering student assessment programs administered? How should they be administered?

6. How should student assessment programs be evaluated?

Therefore the focus was twofold:

1) toward the current practices, policies, and procedures for assessing entering students to the community colleges; and 2) toward the ideal practices, policies, and procedures as perceived by the college personnel who administer student assessment programs.

REVIEW OF THE RELATED LITERATURE

This review of literature is focused on the background and development of community college student assessment programs. The chapter begins with a brief historical view of the philosophical foundations of the community college and continues with current challenges to and modifications of the open door philosophy. The following section is directed toward the development of community college student assessment as part of Florida's educational accountability. A discussion of competency testing as related to accountability and academic achievement is inlcuded. Types of assessment and uses of student assessment by colleges and by students is considered.

The review concludes with findings from a 1979 survey of student assessment programs of member colleges of the League for Innovation in the Community College. The League, a consortium of 17 community colleges throughout the country, is based in Los Angeles. Those community colleges which choose to become members of the League collaborate on projects and share information

of interest within their colleges. In Florida, only Santa Fe Community College belongs to the League for Innovation.

Florida Statute Chapter 79-222 designates as one of the duties of the state board:

> to adopt for public universities and community colleges and from time to time modify minimum standards of college-level communication and computation skills generally associated with successful performance . . . and to approve tests and other assessment procedures which measure student achievement of those skills. (Section 107, subsection (2) of section 229.053)

Basic to assessing mastery of learning at the community college is knowledge of student skills at entrance (Lenning, 1977). When educators assess the learning of a student or the effectiveness of a program, change in learning level becomes an essential focus, as indicated by Hartnett (1971, p. 14):

> Almost all proponents of educational accountability tend to favor a 'value-added' concept. That is, institutions should be judged not by their outputs alone, but by their outputs relative to their inputs. The students' final standing with regard to various characteristics would not be as important as their changes (usually gains) during the college years.

As stated by Cooley (1974, p. 33):

> One of the best established, yet frequently ignored principles in the assessment of educational effects is that the state of students' abilities and motives as they enter an educational program is always the strongest prediction of what they will achieve in that program.

Cooley stresses that ambiguity is the only possible result of assessing educational effects unless a measurement is made prior to the initiation of that educational program.

Historical and Philosophical Foundations of the Community College

The public community college in the United States has been described as the only educational institution that can be truly considered an American social invention (Gleazer, 1963). Sometimes called "democracy's college," it adopted a philosophy of equal educational opportunity for all and advocated an ideal of open admissions (Roueche, Baker, & Brownell, 1971).

Higher education first became available to more than the privileged elite with the creation of land grant colleges by the Morrill Act of 1862. This act gave substance to the concept that each individual, regardless of economic or social status, should have the opportunity to progress educationally as far as interests and abilities might permit (Roueche, 1968).

Gleazer (1970) indicates that the belief in extending educational opportunities to all people led to a philosophy of the "open door" that became the hallmark of the community college movement. The community college's "democratic style, positive philosophy, and social promise

appealed to the American people and won great popularity and support. The unprecedented educational benefits accompanying the G. I. Bill of Rights after World War II further enhanced and expanded the community college movement" (Roueche et al., 1971, p. 10).

This movement was also founded on the conviction that colleges exist to serve the society that supports them. "Education helps to equalize opportunity by stressing the concept of individual worth and serving as a vehicle for personal and social advancement" (Roueche et al., 1971, p. 10).

Postsecondary education in the United States today is a vital national need to which community colleges are in a unique position to respond (Roueche et al., 1971). The role of unskilled workers is becoming less important as technological society grows more complex. There are now few jobs available for high school graduates who have no other training (Cohen, 1969). Conversely, there is a national demand for individuals trained in highly technical skills. Since the nation cannot afford to waste human resources, it becomes imperative that educational institutions provide essential skills for all students (Bloom, 1968).

Two-year college stduents are more likely than university students to come from the lower two-thirds of the socio-economic spectrum (Roueche et al., 1971). The

community college "open door" performs a vital service in removing barriers to education. Geographic location of academic institutions is a crucial factor in education. Colleges constructed within commuting distance of potential students extend educational accessibility to the total population (Roueche, 1968). Modest community college fees remove financial barriers and provide an economical avenue to higher education. However, Cross (1969) states that even if all geographical and financial barriers could be eliminated, racial minorities, women, and those from low socio-economic classes would still be under-represented. The concept of accountability demands active efforts to seek, recruit, enroll, and retain every possible student in the community. Wattenbarger and Goodwin (1962) emphasize that the community college must make readily available, programs of education that meet a wide spectrum of community needs and relate economically to the total patterns of educational opportunity in the area.

Challenges to and Modifications of the Open Door Policy

The number of public community colleges increased from 656 in 1961, to 1,100 in 1970 (Medsker and Tillery, 1971). Between 1948 and 1968 community college student enrollments rose by over one million (Department of Health, Education and Welfare, 1970). In the 1970's

50 percent of those completing high school engaged in some type of postsecondary education. Nationally, one-third of those entering higher education started in a community college (Karabel, 1972). In Florida, almost two-thirds of enrolled college freshmen were in community colleges (Sawyer & Nickens, 1980).

These statistics and a substantial body of knowledge (Cross, 1968; Medsker & Trent, 1965; Willingham, 1970) reflect favorably on the community college. However, now that the community college is widely recognized as a community-based, open door college providing an upward extension of educational opportunities (Kaster, 1979), it is now faced with the critical challenge of becoming accountable for its unfulfilled potential by translating ideals into reality.

The open door policy implies acceptance of the concept of universal higher education. According to Roueche et al. (1971) community colleges have become the primary means of economic and social advancement for the lower segment of the population. The typical student body is an extremely diverse population that is often drawn from backgrounds characterized by lower social and economic status, lower educational achievement, marginal employment, and limited participation in community affairs. Students from these environments are disadvantaged

to the extent that their culture has failed to provide them with experiences typical of the students that traditional colleges customarily serve. The community college must recognize that a considerable number of disadvantaged, low-aptitude students in its student body create unique problems that require changes in traditional curriculum and instructional techniques. Accountability demands that the success of the community college be judged by results. Student success, both retention and achievement in college, is an accurate measure of the open door policy (Roueche et al., 1971).

Dropout rates at community colleges generally are astonishing. The typical city community college reports annual student attrition rates of more than 50 percent (Cohen, 1969). As many as 75 percent of the lower-achieving students withdraw during their first year (Schenz, 1963). In the typical California junior college, 80 percent of the entering students enrolled in remedial English, but only 20 percent later enrolled in regular college English classes (Bossone, 1966). Remedial courses are generally poorly designed, poorly taught, and seldom evaluated adequately (Roueche et al., 1971). A national survey of community colleges revealed that although 91 percent of the institutions espoused the concept of the open door, only 55 percent provided programs appropriate for non-traditional students (Schenz, 1963).

While growth in community college enrollment in the last decade symbolizes the success of the community college movement, it also provides the basis for a threat to its existence (Kaster, 1979). Kaster explains that as community colleges attempt to provide more services, taxpayers are beginning to be alarmed at what appears to them to be an unlimited expansion of cost of this educational system. This situation has been complicated by an erratic economy, rising inflation, and competing demands for other public services. Legislative reactions in Florida are evidenced by enrollment caps, funding reductions, challenges of curriculum relevance, and accountability demands favoring centralized control (Kaster, 1979).

Rippey and Roueche (1977) indicate that there are crucial implications of reduced funding for the open door commitment of the community college. In the early 1970's, when hit by both the inflation spiral and an unprecedented recession, several states began to search for ways to reduce the amount of money budgeted for higher education. One easy and obvious solution used by some colleges was to place a lid on student enrollments. So the community colleges' very success in locating new sources of students has hastened the advent of enrollment ceilings. What will be the consequences in community college enrollments from these externally imposed enrollment

limits? The most obvious result is that fewer students will be served by higher education; that is, some students will be denied access to higher education (Rippey & Roueche, 1977). This in itself is counter to the national policy that developed in the 1960's that all persons should have access to higher education as evidenced by greater federal aid to institutions and to students. The crucial question is: who will be denied access to higher education? Rippey and Roueche (1977) propose that the nation's answer to this dilemma is to deny access to none but rather to stop recruiting non-traditional students. "With enrollment limits, it is likely that the community colleges will begin to ease recruitment of ethnic minorities, poor persons, and other classes of non-traditional college students" (p. 58). Community colleges are only now beginning to identify and serve those constituents in their communities who need educational opportunity most desparately. Rippey and Roueche (1977) point out the absurdity of providing access to only those who need it least while doors are closed off to those who have no foreseeable options.

In 1960, the California state college system implemented one of the first major open admissions programs in the United States. By the late 1960's, 68 percent of California high school graduates were entering college. No evidence exists that its system of higher education has suffered as a result of open admissions (Harrison & Rayburn, 1979).

Cross (1971) points out that the success or failure of an open admissions program depends upon remediation and advising. A study of open admissions-type students at the University of Detroit (Harrison & Rayburn, 1979) resulted in findings that demonstrated that as students were provided academic assistance, adequate counseling, and ample financial aid, open admissions-type students significantly achieved in the basic skill areas of reading, math, and language. Karabel (1972) states that "both evidence and common sense . . . indicate that nothing inherent in open admissions will bring about a lowering of academic standards" (p. 39).

The Development of Community College Student Assessment as Part of Florida's Educational Accountability

In order to understand the development of community college entering student assessment in Florida it is necessary to provide a background of the actions of the Legislature and the State Department of Education in the 1970's. Florida's accountability movement began with a statewide attack on functional illiteracy among high school graduates. A competency testing approach to determine student mastery of basic skills was implemented (Fisher, 1978). This movement towards "competency-based education" in the elementary and secondary schools has resulted in many implications and potential consequences

for college admissions, curricula, graduation requirements and student learning (Spady, 1978).

Florida has been committed to educational accountability since the late sixties (Fisher, 1978). The state began developing programs and laws when various citizen reports and special study groups revealed a lack of commitment to goals and a lack of data about school effectiveness.

Florida's accountability laws were passed in a period when many states developed accountability policies. But in Florida the legislature did more than pass a law or two and then forget the issue. The lawmakers, with input from Florida educators and the Department of Education staff, adjusted the educational accountability statutes from session to session as they struggled to create a workable system (Fisher, 1978).

The House of Representatives reviewed the accountability programs during late 1975 and early 1976. Under the leadership of the House Education Committee, a staff conducted a full investigation of the accountability laws, with particular emphasis on statewide assessment. This staff was critical of the way in which certain aspects of the laws had been implemented (House of Representatives, 1976). At the same time, key members of the Senate Education Committee were becoming interested in the quality of education public school students were receiving. They were concerned because students were

being promoted and graduated from school without minimal reading, writing, and arithmetic skills.

When the House and the Senate interests merged in conference committees, the 1976 Educational Accountability Act was written and passed unanimously. The act was quite comprehensive and went far beyond merely referring to minimum requirements and functional literacy (Fisher, 1976).

The 1976 act mandated new minimum graduation standards for the class of 1978-79. These minimum standards not only included a miminum number of course credits, but also mastery of the basic skills and satisfactory performance on functional literacy tests (Department of Education, 1976). It was decided that the Florida Statewide Assessment Program would become the focus for determining student mastery of the basic skills and functional literacy. The program has previously tested all public school students in grades 3 and 5, but the new act expanded it to grades 3, 5, 8, and 11 (Fisher, 1978; Graves, 1978; Tyler, 1978).

Florida State Department of Education (SDE) decided to split the grade 11 assessment program into two components. The first would measure student mastery of the basic skills only as a preliminary screening device. This component focused on practical problems and tasks. The second component, the test of functional literacy, would be the true hurdle for students. It would measure 24

skills - 13 in math and 11 in communication skills (Department of Education, 1977). Students would be expected to pass "the test" within four tries or receive only a certificate of attendance rather than a diploma. (Fisher, 1978; Glass, 1978; Brandt, 1978; Graves, 1978; Tyler, 1978). Florida State Assessment Program officials enlisted the assistance of the Educational Testing Service of Princeton, New Jersey, in drafting test items. After revision, pretest, review, and changes, the test was ready by May 1977 (Fisher, 1978). The first administration of the Functional Literacy Test stirred controversy due to the high failure rate of students. The mathematics and communications failure rates eventually hit 36 percent and 8 percent respectively, causing Time magazine to say, "Florida Flunks" (Time, 1977). While some applauded the test, others made serious criticisms (Graves, 1978). After examining the manual for standard-setting for the test, Glass, a leading educational researcher, concluded that the test items had "never been validated as measures of 'survival skills', and the pass-fail standards were set mindlessly and capriciously." (Glass, 1978, p. 605).

The 1976 Accountability Act also mandated remedial instruction for all students who needed assistance. The state provided a compensatory education program that distributed several million to local districts to provide remedial instruction (Fisher, 1978; Glass, 1978).

The National History of Competency-Based Education

In 1972 the Oregon State Board of Education took an important first step in redefining the basis of high school graduation requirements (Spady, 1978). The board established a framework for students to meet locally determined "competency" standards in three broad areas. Starting in 1978, graduation from Oregon's high schools was to be contingent on satisfying attendance, course-credit, and the new minimum competency requirements in basic math and communication skills. This action became a catalyst for similar policy debates and changes across the country. Although the Oregon policy was criticized by a variety of constituencies for quite diverse reasons, it symbolized the beginning of the "comptency-based education" movement in United States high schools. By April 1978, at least thirty-three states had adopted some kind of policy requiring that students achieve minimum competencies in basic skills in addition to passing a sufficient number of courses as conditions for receiving a diploma (Spady, 1978; Pipho, 1978).

There are fairly uniform themes that characterize the rationale behind these actions (Spady, 1978). One is that both school grading standards and the diploma have lost their credibility. A second is that the knowledge, skills, and competencies of recent high school graduates, particularly those who have gone on to college,

are far lower than they should be. A third is that some mechanism must be implemented that will improve minimum levels of student achievement and document those gains in objective terms. A fourth is that more attention must be given to developing capacities that are essential to young people as they face the realities of life outside the school (Spady, 1978).

Minimum competency testing is now looking different than it did in 1975-1977. What began as a startling idea in Oregon, California, and Florida has now arrived in some form in each state. In general, the minimum competency testing movement has been mellowing with age. Much of the action has now switched from the state legislatures to state departments of education, state and national education groups, and school districts (Pipho, 1978).

Rationale for Competency Testing

According to Haney and Madaus (1979, p. 463) the "enthusiasm for competency tests stems from a belief that the testing of essential skills and competencies will help raise academic standards and increase educational achievement." On the surface, the idea of minimum-competency testing is immensely attractive. It is hard for anyone to argue against competence. In a time of wide-spread concern over deteriorating

educational standards, validated by declining SAT scores, systematic assessment of students' competence certainly seems to make sense. Students who are certified minimally competent would avoid the suspicion that they are products of a faltering educational system, and students who fail competency tests can theoretically receive remedial help in order to gain the competencies and skills they need to enter the world of work. However, many questions arise regarding implementation. The primary unresolved problems concerning minimum-competency-testing programs include the following three: 1) the definition of competencies; 2) the specifications of minimal competencies, and 3) the testing of minimal competencies.

Another explanation for the support of minimum-competency-testing is the shift in political climate from liberal to conservative thinking on education (Haney and Madaus, 1978). It could be called a shift from concern over equality to concern over excellence or a shift from educational equity to educational achievement. In part the minimum-competency movement is one aspect of the back to basics movement, part of a backlash against the "open education" philosophy of the 1960's (Kilpatrick, 1977).

The focus on testing perhaps stems in part from the fact that it is reform that "is clearly being led or pushed, by non-educators" (Pipho, 1978, p. 586). As non-educators, enthusiasts of competency testing are free

to focus on the results and to pay little attention to the processes by which they might be achieved.

Another perspective on the phenomenon of minimum-competency-testing is rising concern over the costs of education (Haney and Madaus, 1978). Public education is by far the largest and most expensive undertaking of state and local governments, accounting for more than one-third of their direct expenditures. Local school districts receive about half of their total revenues from local taxes, and per pupil expenditures have more than doubled in the past decade (Golladay, 1977). Not only is the public apparently reluctant to pay more, but it is increasingly demanding proof of the return on the expenditures it is already making. Since test scores are one of the most convenient of educational measures, such demands more often than not get translated into calls for more testing (Haney and Madaus, 1978).

The rapid rise of the minimum-competency-testing movement is due largely to the fact that there is a merging of interests on the idea. Conservatives support it because of concerns over costs, and liberals favor it to promote more quality education (Haney and Madaus, 1978).

Issues Regarding Competency Testing

Pipho (1978) discusses some of the contradictions and controversies of the minimum-competency-testing

movement. Some of the most apparent controversies would include the following: 1) With implementation deadlines scheduled all the way up to 1985, it may be years before anyone knows whether the mandates for statewide minimum competency standards have really helped to improve student achievement or instruction. 2) The minimum-competency-testing movement is clearly being led by non-educators. 3) There appears to be an assumption that school skills will make an automatic transfer to on-the-job skills. 4) Minimum-competency-testing programs have in some cases been mandated for local districts and state departments of education with little or no financial support and little understanding of the cost of expensive remediation. 5) National standards and national testing would violate the principle of a locally controlled American educational system.

Brickell (1978) points out that adopting a policy on minimum-competency-testing requires answering a number of major questions that would include the following:

1. What competencies will be measured - school skills or life skills or both?
2. How will these competencies be measured? The possibilities range from testing through experience in actual performance situations to testing with paper and pencil. Brickell indicates that as the individual moves away from actual performance situations

in life and move toward paper and pencil, testing becomes easier and cheaper, but the test results become less likely to predict later success. Thus a student can fail a minimum competency paper-and-pencil test but succeed in the actual performance situations of real life. Another decision is whether to develop one's own test or use what is available.

3. Will competencies be measured during school or at the end of school?
4. Will one minimum standard apply to all students or will ability, special talents, family background and other factors known to affect the learning of students be considered?
5. How high will the minimum be? This question brings up several other related questions. Suppose remediation doesn't work; then what? How many students can a state afford - both economically and politically - to remediate, or not promote, or not graduate if remediation fails? If students cannot achieve the minimum will the minimum be lowered to meet the students?
6. Are the minimum competencies for students or for schools?

Thus, there are important issues to consider regarding a minimum-competency-testing program.

Student Assessment in the Community College

Community college student assessment can be divided into two categories: 1) Entering student assessment which describes students when they enter the college, and 2) assessment which reflects what happens to students after entry. This second type of assessment is important in that it is a measure of what learning has been mastered and it serves as a measure of readiness for further education (Lunneborg, 1977).

Lunneborg (1977) suggests that there are five areas in which information should be gathered about students at entry. The first area would be prior educational record--coursework taken and grades earned. The next two areas would include achievement testing and assessment of both general and specific aptitudes. Measurement should also include nonintellective or noncognitive personal characteristics that affect readiness for learning. This last area is of particular importance since only about one-third of the very high community college student attrition is explained on "intellective" grounds (Monroe, 1972). These personal characteristics should not be overlooked; Cross (1972) points out that the lack of self-confidence is so great that fewer than one-third of community college students are confident of their ability to handle coursework. Caughren (1973) studied motivation of community college students and emphasized the importance

of the measurement profession concerning itself more with the construction of tests in the area of assessing creativity, persistence, interests, values, attitudes, manual and artistic skills. He points out that these nonintellective, personal characteristics have relevance not only in a student's choice of a particular educational or vocational goal, but also in the degree of success the student might expect in the particular chosen venture.

However, given the most attention by community college assessment programs is the measurement of educational proficiencies and academic skills (Lunneborg, 1977). Monroe (1972) reports that at least 75 percent of community colleges do some diagnostic testing of skill in communication and computation. A number of standardized testing programs are available. Examples of these programs would include the Comparative Guidance and Placement Program of the College Entrance Examination Board (CEEB), the American College Testing (ACT) Assessment, and the Sequencial Tests of Educational Progress and Cooperative Achievement Tests developed by the Educational Testing Service. Where standard placement tests do not match educational objectives, local instruments are constructed for the same purposes. Lunneborg (1977, p. 28) states that "local characteristics should have a major influence on the development of any student assessment system.

The description of learning goals, instructional resources, and student clientele, unique in some detail to the institution, will all interact to shape a testing program as it matures."

Uses of Student Assessment by Colleges and by Students

"Assessment" is used to mean the measurement, analysis, appraisal, and evaluation of the attainment or increase of some desired and intended accomplishment for individuals or groups of students (Lenning, 1977). Student assessment is generally considered to be a continual process and is not a one-time affair which takes place either near or at the start of an academic term (McCrary, 1979). However, one of the problems in measuring educational effects or gains in the community college is that one must first know the state of students' abilities and motives as they enter an educational program. That knowledge is the strongest prediction of what students will achieve in that program (Cooley, 1974). Therefore, basic to any continued assessment must be the initial assessment of entering students.

Student assessment can be used in a number of specific practical ways by community colleges and their students (Miller and Prince, 1976). Lenning (1977) discusses several major uses of this information that will be briefly summarized in the following sections.

Student placement in courses. One of the most common uses of assessment data in many community colleges is for

course placement purposes. Assessment scores are used to separate entering students into those who need general remedial work, those who should enter the regular sequence of the program, and those who will be allowed to exempt certain first-level courses in the sequence if they desire to do so. Entering student assessment data, such as American College Testing Program Assessment or Comparative Guidance and Placement scores, along with high school grades and successful completion of particular high school courses, are all academic achievement data that are used by many community colleges for initial course placement of students (Lenning, 1977). The community colleges are confronted with an extremely wide variety of educational backgrounds. It has been reported, for example, that within a typical college's transfer program, enrollment reading level may range from Grade Four to Grade Fourteen (Lunneborg, 1977).

Evaluating institutional effectiveness. Increasingly, postsecondary education is being called upon to be accountable for the educational benefits they provide for students (Lenning, 1974). "Evaluation of the effectiveness of colleges and their programs, and relating that effectiveness to program costs, is the acknowledged way to gather the evidence being demanded to show that colleges are doing worthwhile jobs" (p. 7). Overall assessment of the academic achievements of students as a group is an important part of any evaluation. Lenning (1977) indicates that these evaluations should include

the effect of student academic achievement on such specific areas as curriculum and instructional methods and techniques.

Student advisement and counseling. By providing feedback to students about their skill level, instructors, counselors, and academic advisors can help students explore the realism of their plans, identify areas of weakness that need particular attention, and determine the need for particular courses of action. This feedback to students can assist them in their self-understanding, which in turn leads to greater individual responsibility and self-direction that enables students to plan realistically for their futures. This idea is well summed up by Miller and Prince (1976, p. 52), "Growing is a cumulative business. Knowledge of an individual's group's, or organization's present status is a prerequisite to a planned change."

Planning learning experiences. In order to plan effective future learning experiences, institutional personnel must understand the level of development of groups of students, and of individual students within the groups. This knowledge can assist institutional and program staff in planning future learning experiences, not only for these particular students, but also for students entering the program in the future.

Identifying student problems. Some assessment instruments may serve a diagnostic function in that they test specific skill areas which indicate proficiency in a particular area.

Identification of low skill areas for particular students or a group as a whole can indicate whether remedial or developmental courses are necessary. Diagnostic instruments can identify students' strong and weak areas and can thereby help students improve in their areas of weakness and build on their areas of strength.

Additional uses. On-going student assessment, of course, is used for the purpose of assigning grades. And lastly, on-going assessment is used as a means of evaluating innovative instructional styles and materials (Lenning, 1977). These two uses of student assessment will not be discussed in any detail since these assessments are on-going rather than entering assessment procedures.

Although counselors and other student personnel workers have traditionally used assessment results to help them better understand and assist the students with whom they are working, over the past few years there has been a strong move to help students use such data themselves without the assistance of the counselor or academic advisor (Lenning, 1977). Miller and Prince's (1976) theory of student development indicated that the goal of assessment for student development:

> is to help students understand their current patterns of behavior, emphasizing positively the specific skills they have instead of the ones they lack. From this base, all students can move toward increased self-direction . . . . Assessment programs must be designed with

> students rather than for or about them; therefore, only information that can directly increase students' self-understanding or improve their self-direction need be collected. The primary focus of many student assessment efforts has been to help student affairs workers better understand their clients . Although this objective is desirable, it has tended to create volumes of information about students that is rarely used directly by them. (pp. 48-49)

In summary, for assessment programs to have impact it seems necessary to consider thoroughly the purposes for gathering assessment information when selecting or developing instruments (Airasian and Madaus, 1972; Lenning, 1977). Student assessment can improve the decisions of several groups. Students can more realistically plan their educational and occupational careers with an appreciation of their chances of success in their chosen area. Colleges can best plan their programs, organize their curricula, attempt to meet the needs of specific groups, and evaluate the success of their efforts when they have comprehensive information about the skill levels of their students. And the success of the college in meeting the needs of its students can be partially evaluated on the basis of student progress (Baird, 1977).

Community College Entering Student Assessment

The most recent and useful data on entering student assessment in community colleges were compiled by the League for Innovation in the Community College (1979).

Sixty-three League college representatives met in Dallas, September 25-28, 1979, to discuss the state of the art of assessing students for academic success. This conference marked the culmination of a project undertaken by a League Fellow to study assessment policies in League colleges. The diversity of community college student assessment programs was brought out in Richard McCrary's summary of this conference. His comment was that, in his opinion, the subtitle for the conference should have been "Trends Toward Diversity." His conference summary reports that the number of goals of student assessment "appear to be as varied as the number of institutions represented" (McCrary, 1979, p. 1). This diversity of goals may, of course, be related to the lack of standardized instruments available. In many cases, campus-produced instruments are utilized because there is not an appropriate standardized instrument available.

There was some quasi-agreement about what areas should be assessed: English and math. However, beyond that, the agreement breaks down. Some colleges assess for reading, others for music, others for chemistry, and the list can be extensive. Little if any agreement exists about who should be assessed. Campuses themselves have difficulty in agreeing on this issue.

The area most closely agreed upon was that concerning the parameters of testing. Testing should be 1) quick,

2) easily administered by paraprofessional or clerical staff, and 3) easily scored in order that results are known as soon as possible.

No agreement was reached on how assessment results should be used regarding course selection or placement of students in courses. Some administrators felt that if one of the college's goals is to assist students in making realistic decisions, then assessment results should be used to place students in courses. Other administrators felt that the student should have the final choice regarding course selection.

Since so much diversity existed in the areas assessed, it is no surprise that the instruments used were also extremely diverse. No statistics were calculated from the League survey. However, reading appeared to be the area in which standardized instruments are most often used. Among standardized instruments, the Nelson-Denny appeared often as the standardized instrument of assessment. Beyond that, it would be difficult to identify "common" instruments for assessment since the diversity is so great.

Summary

Central to the philosophical foundation of the community college is the "open door policy" which advocates the ideal of open admissions and educational opportunity for all. The community college movement was founded on the conviction that public colleges exist to serve the society that supports them. However, now that the community college has become widely recognized as a community-based, open door college providing an upward extension of educational opportunities, it is now faced with the critical challenge of becoming accountable for its potential by translating ideals into reality. As community colleges attempt to provide more services, disenchanted taxpayers are beginning to wonder what they are getting for their tax money. Legislative reactions in Florida may be found in such actions as enrollment caps, funding reductions, challenges of curriculum relevance, and accountability demands favoring centralized control. One of the serious consequences of reduced funding for the community colleges is that fewer students can be served; that is, some students will be denied access to higher education. This, of course contradicts the open door policy.

The review of literature revealed how community college student assessment programs have developed as a part of Florida's educational accountability. The movement began with a statewide attack on functional literacy among high school graduates. A competency testing approach to determine

student mastery of basic skills was implemented. This interest in competency based education then extended to the elementary and postsecondary levels. The thrust toward mastery of minimum competence in basic skills has resulted in many implications and potential consequences for college admissions, curricula, graduation requirements and student learning.

The literature has shown that the enthusiasm for competency tests stems from a belief that the testing of essential skills and competencies will help raise academic achievement. Thus, liberals are favoring the minimum-competency-testing movement because they believe it promotes more quality education, and conservatives support it because of concerns over costs.

The review made apparent important issues to consider regarding a minimum-competency-testing program. Controversies include issues such as what competencies should be measured; how and when these competencies will be measured; if one minimum standard can be applied to all students; how high the minimum will be; and whether minimum competencies are for students or for schools. Other controversies include the assumption that school skills make an automatic transfer to on-the-job skills; financial support of minimum-competency-testing programs; and adherence to the principle of locally controlled American educational system.

Community college student assessment was shown to be divided into two categories: entering student assessment which describes students when they enter the college and assessment which reflects what happens to students after entry. There are five major areas in which information should be gathered about students at entry. These areas would include: prior educational record - courses taken and grades earned; achievement testing and assessment of both general and specific aptitudes; measurement of nonintellective or noncognitive personal characteristics that affect readiness for learning; measurement of educational proficiencies and academic skills. This last area is given the most attention by community college assessment programs, particularly in communication and computation skills.

One of the more common uses of assessment data in many community colleges is for course placement purposes. Assessment scores are used to separate entering students into those who need general remedial work, those who should enter the regular sequence of the program, and those who will be allowed to exempt certain first-level courses in the sequence. Evaluating institutional effectiveness and relating that effectiveness to program costs has become a common use of assessment data. Assessment results are also used in student advisement and counseling. These data can also be used to assist institutional staff in planning future learning experiences. Some assessment instruments may serve a diagnostic function in that

they test specific skill areas which indicate proficiency in a particular area. Identification of low skill areas for particular students or a group as a whole can indicate whether remedial or developmental courses are necessary. Finally, on-going student assessment is used to assign grades and as a means of evaluating innovative instructional styles.

The review of literature revealed such a diversity in assessment practices in League colleges that few generalizations could be made in regard to the goals of assessment programs, instruments used in the assessment process, the administration of assessment, use of the results of assessment, and evaluation of assessment programs. Clearly, research that could be of assistance in any of these areas was needed.

PROCEDURES

Population

Since this study is a case study of Florida community colleges, the population for this study included all 28 community and junior colleges in the state. Respondents to the Survey of Entering Student Assessment Procedures and the Entering Student Assessment Opinionnaire were coordinators of student assessment or the coordinator's designee at each of these colleges.

Florida community and junior colleges include the following: Brevard Community College, Broward Community College, Central Florida Community College, Chipola Junior College, Daytona Beach Community College, Edison Community College, Florida Junior College at Jacksonville, Florida Keys Community College, Gulf Coast Community College, Hillsborough Community College, Indian River Community College, Lake City Community College, Lake-Sumter Community College, Manatee Junior College, Miami-Dade Community College, North Florida Junior College, Okaloosa-Walton Junior College, Palm Beach Junior College, Pasco-Hernando Community College, Pensacola Junior College, Polk Community College, St. Johns River Community College, St. Petersburg Junior College, Santa Fe Community College, Seminole Community College, South Florida Junior College, Tallahassee Community College and Valencia Community College.

Only St. Johns River Community College did not participate in Part I of the study. One hundred percent return was obtained on the Entering Student Assessment Opinionnaire of Part II of this study.

Instrumentation

The instruments utilized in this study are the Survey of Entering Student Assessment Procedures (Appendix A) and the Structured Interview Guide to Entering Student Assessment Procedures. These instruments were designed to collect data on current policies and practices regarding assessment of entering students at community and junior colleges in

Florida. The Entering Student Assessment Opinionnaire (Appendix B) was utilized to collect data on the perceptions of student assessment coordinators in regard to the issues involved in assessing entering students.

All three instruments were developed by the researcher for the purposes of this study. In order to obtain content and face validation, the researcher proceeded in the following manner when developing the instruments:

1. A preliminary version of the instrument was developed from the research questions that were posed. Each question appearing on the Survey of Entering Student Assessment Procedures was designed to provide data that answered these pertinent questions. The questions appearing on the Structured Interview Guide of Entering Student Assessment Procedures paralleled those of the original instrument. Since the second form is for interview purposes, it differed only in that open-ended questions were asked rather than presenting a statement with possible responses to choose from. Each question on this second form had a one-by-one correspondence with items on the Survey of Entering Student Assessment Procedures.

2. Drafts of the two instruments were presented at a regularly scheduled meeting of the Inter-Institutional Research Council, composed of institutional researchers of member colleges of the consortium of community colleges.

These 12 researchers were given a purpose statement of this study and copies of the instruments and asked to clarify and revise these survey instruments in writing. The researchers were requested to indicate the particular terminology that was most consistent with that used in the community colleges in order to avoid unnecessary confusion.

3. The suggestions offered by the panel of experts were incorporated into a revision of the instruments.

4. The revised instrument was mailed to the 12 researchers for their final input corrections.

5. These comments were used to make final revisions to the instruments.

A preliminary version of the Entering Student Assessment Opinionnaire was developed from both issues arising in the review of literature and the research questions that were posed. Copies of the draft of this instrument were mailed to the same 12 Inter-Institutional Research Council members for their clarification and revision in writing. Their suggestions were again incorporated into the development of the final instrument.

The Survey of Entering Student Assessment Procedures was mailed with a cover letter and a stamped return envelope to the coordinators of student assessment programs at all community and junior colleges in Florida. The survey forms were returned by mail to the Inter-Institutional Research Council (IRC) at the University of Florida.

The Structured Interview Guide to Entering Student Assessment Procedures was an interview guide that paralleled the format of the Survey to Entering Student Assessment Procedures. It was used with only Manatee Junior College and South Florida Community College, since these colleges did not respond to the mailed survey.

The Entering Student Assessment Opinionnaire was mailed with a cover letter, answer sheet, and a stamped return envelope to the same individuals (coordinators of student assessment programs or their designees) who responded to the Survey of Entering Student Assessment Procedures. The opinionnaires were returned to the IRC office at the University of Florida.

Data Collection

Data concerning the current practice and policies of assessing entering students in Florida community colleges were collected by using the Survey of Entering Student Assessment Procedures. The instrument in its final form was mailed to each of Florida's 28 community and junior colleges named previously. Multi-campus institutions were treated as separate institutions where varying assessment procedures exist at the different campuses.

The 12 researchers of the Inter-Institutional Research Council who represent member colleges of the consortium, were asked to supply the name of the coordinator of student assessment for their respective colleges. Other student assessment coordinators were identified through the Florida Education Directory. If not located in the directory, a telephone call was made to that campus in order to identify the coordinator of student assessment.

The mailing included a letter of transmittal and the survey instrument. The mailing also included a target return date and a stamped envelope for return to the IRC office at the University of Florida.

Beginning two weeks after the mailing, follow-up telephone calls were made to non-respondents. If a response was not then received, another telephone call was made to non respondents. At this time questions from the Structured Interview Guide to Entering Student Assessment Procedures were read to the coordinator of the assessment program and data were collected via a structured telephone interview. The questions on the Structured Interview Guide paralleled the questions on the original survey instrument. Data were collected by the Survey of Entering Student Assessment Procedures by all colleges with the exception of Manatee Junior College and South Florida Community College which responded to the Structured Interview Guide.

The responses to these instruments were recorded and analyzed for presentation in this study.

Perceptions regarding issues involved in assessing entering students were obtained from the Entering Student Assessment Opinionnaire administered to the coordinators of student assessment programs at all Florida community and junior colleges. This instrument was mailed with a cover letter, answer sheet, and a stamped return envelope. The opinionnaires were returned to the IRC office at the University of Florida. The responses were recorded for statistical analysis.

Analysis of Data

Data from the Survey of Entering Student Assessment Procedures and the Structured Interview Guide to Entering Student Assessment Procedures were collected and coded. Frequencies and percentages were computed on each variable using subprograms of the Statistical Package for Social Sciences (SPSS). All data except cost data were treated with subprogram CROSSTABS which computed two-way joint frequency tables of all variables by college. Cost data were treated with subprogram CONDESCRIPTIVE which computed cost by college. Tables 1 through 17 present the results of the data analysis of this survey.

The data from the Entering Student Assessment Opinionnaire were recorded using an optical character reader for statistical analysis by computer. Responses were analyzed using sub-programs of the Statistical Package for the Social Sciences (SPSS) on the Amdahl 470 computer at Northeast Regional Data Center at the State University System located on the University of Florida campus.

Frequencies, means, medians, and standard deviations were computed for each item. Descriptive statistics are presented in Tables 18 through 21.

RESULTS

The Survey of Entering Student Assessment Procedures, used to collect information on current practices and policies regarding assessment of entering students at the community colleges, was responded to by all community and junior colleges in the state with the exception of one college; St. Johns River Community College did not respond to the survey. Responding colleges include the following: Brevard Community College, Broward Community College, Central Florida Community College, Chipola Junior College, Daytona Beach Community College, Edison Community College, Florida Junior College at Jacksonville, Florida Keys Community College, Gulf Coast Community College, Hillsborough Community College, Indian River Community College, Lake City Community College, Lake-Sumter Community College, Manatee Junior College, Miami-Dade Community College, North Florida Junior College, Okaloosa-Walton Junior College, Palm Beach Junior College, Pasco-

Hernando Community College, Pensacola Junior College, Polk Community College, St. Petersburg Junior College, Santa Fe Community College, Seminole Community College, South Florida Junior College, Tallahassee Community College and Valencia Community College.

The Entering Student Assessment Opinionnaire used to collect the responses of assessment program coordinators regarding what they considered entering student assessment should be, was completed by all Florida community and junior colleges.

Results of Survey of Entering Student Assessment Procedures

Job Title Demographics

Respondents from 26 of the 28 Florida community and junior colleges completed the Survey of Entering Student Assessment Procedures. Only St. Johns River Community College did not participate in this part of the study. Polk Community College responded with a letter of explanation that their student assessment program was in transition at the time of the survey. Therefore, that college did not complete the survey form and was not included in data analyses. A survey form was mailed to each campus of multi-campus institutions. However, all multi-campus institutions except for Florida Junior College at Jacksonville chose to report a uniform policy across campuses. Since Florida Junior College's assessment program differed between its four campuses, four separate survey forms were returned. Therefore, the sample comprising the first part of this study is a total N = 29.

Of the 29 community and junior college personnel responding to the Survey of Entering Student Assessment Procedures 8 (27.6%) were Deans of Students or Student Development or Student Services. Table 1 indicates that four respondents (13.8%) indicated their job title was Director of Counseling and/or Guidance and three (10.3%) listed their job title as Counselor for Assessment or Testing. Two respondents (6.9%) were Vice-Presidents. The remaining twelve survey forms were responded to by twelve individuals each reporting their job title as one of the following: Coordinator of Assessment, Registrar, Director of Student Personnel Services, Chairman of the Testing and Research Department, Director of Testing, Chairperson of Counseling/Admissions, Coordinator of Counseling, Test Technician/Testing Agent, Director of Educational Research and Planning, Provost, Psychometric Analyst, and Director of Placement and Follow-up.

Subject Areas Assessed

Table 2 provides information (absolute frequency and percentage) about what subject areas are currently being assessed at Florida community colleges. Data indicate that 24 campuses (82.8%) assess mathematical computation skills, 21 campuses (72.4%) assess reading comprehension, 19 campuses (65.5%) assess English usage, and 15 campuses (51.7%) assess English writing ability of incoming students. Only two respondents (6.9%) reported that their programs

TABLE 1

Job Title of Person Completing Survey of Entering Student Assessment Procedures by Absolute Frequency and Percentage

Job Title	Absolute Frequency (N = 29)	Percentage
Director of Counseling and/or Guidance	4	13.8
Coordinator of Assessment	1	3.4
Registrar	1	3.4
Dean of Students or Student Development or Student Services	8	27.6
Counselor for Assessment or Testing	3	10.3
Vice President	2	6.9
Director of Student Personnel Services	1	3.4
Chairman of Testing and Research Department	1	3.4
Director of Testing	1	3.4
Chairperson of Counseling/Admissions	1	3.4
Coordinator of Counseling	1	3.4
Test Technician/Testing Agent	1	3.4
Director of Educational Research and Planning	1	3.4
Provost	1	3.4
Psychometric Analyst	1	3.4
Director of Placement and Follow-Up	1	3.4

TABLE 2

Subject Areas in Which First-Time-In-College Students Are Assessed by Absolute Frequency and Percentage

Subject Area	Absolute Frequency (N = 29)	Percentage
Reading Comprehension	21	72.4
English Writing Ability	15	51.7
English Usage	19	65.5
Mathematical Computation Skills	24	82.8
Science	2	6.9
Social Science	1	3.4

assess science and one campus (3.4%) reported that its assessment program assesses in the area of social science. Table 2 provides information about frequencies by subject area.

Assessment Instrument Data

Table 3 provides information on the responses of the sample to statements regarding assessment instruments. Twenty-two campuses (75.9%) indicated that all entering students take the same assessment instruments. Two campuses (6.9%) indicated that all entering students take a core instrument(s) plus additional instruments as determined by course selection. Two campuses (6.9%) indicated that a standardized test (such as the American College Test or the Scholastic Aptitude Test) is recommended but not required for assessment prior to admission to the college. One campus (3.4%) indicated that all assessment is voluntary. Another campus indicated that students with no standardized test scores are referred to the subject area departments for assessment. And finally, one campus reported that all students take a core reading and English assessment instrument and various math instruments according to course background.

How Assessment Is Administered

Table 4 provides information regarding the administration of assessment instruments. Twelve campuses (41.4%) indicated that assessment instruments are administered in groups at orientation. Another 7 campuses (24.1%) reported that

TABLE 3

Responses of Sample to Statements Regarding Assessment Instruments by Absolute Frequency and Percentage

Statement	Absolute Frequency (N = 29)	Percentage
All students take the same assessment instruments	22	75.9
All students take a core instrument(s) plus additional instruments as determined by course selection	2	6.9
Students take separate instruments as determined by course selection	0	0
All assessment is voluntary	1	3.4
A standardized test is recommended but not required prior to admission	2	6.9
Students with no standardized test scores are referred to the subject area departments for assessment	1	3.4
All students take a core reading and English assessment instrument and various math instruments according to course background	1	3.4

TABLE 4

Responses of Sample to Statements Regarding the Administration of Assessment by Absolute Frequency and Percentage

How Assessment is Administered	Absolute Frequency (N = 29)	Percentage
In groups, at orientation	12	41.4
Individually, during pre-registration	4	13.8
In groups, during pre-registration	7	24.1
Individually, during registration	3	10.3
In groups, during registration	2	6.9
As needed on a walk-in basis	1	3.4
Assessed by course instructors	1	3.4
In groups, once each week during summer session	1	3.4
Individually, at other designated times	4	13.8
Individually, prior to registration with take-home assessment	2	6.9
Assessed during national or local testing dates	4	13.8
Mail-home self-scoring assessment used	1	3.4
Assessed during first class periods	2	6.9

assessment instruments are administered in groups during pre-registration. Four campuses (13.8%) assess individually during pre-registration. Four more campuses administer their assessment instruments individually at other designated times. An additional four colleges assess by the use of national or local testing dates. Three campuses (10.3%) administer their assessment instruments individually during registration. Two campuses (6.9%) indicated that they administer their assessment instruments in groups during registration. Two campuses (6.9%) indicated that their assessment was done individually prior to registration with a take-home assessment. Two campuses assess during the first class period. One campus (3.4%) indicated that assessment instruments are administered as needed on a walk-in basis. One campus reported that course instructors assess their students and another campus assessed in groups once each week during summer session. One college uses a mail-home self-scoring assessment procedure.

Additional Student Assessment Factors

Table 5 provides information on additional factors besides the results of assessment instruments that are considered as part of first-time-in-college student assessment. High school grades are considered as part of assessment by 22 of the responding campuses (75.9%). Twenty-one respondents (72.4%) reported that previous college course work is considered as part of assessment.

TABLE 5

Factors Besides the Results of Assessment Instruments That Are Considered as Part of First-Time-In-College Student Assessment by Absolute Frequency and Percentage

Factor	Absolute Frequency (N = 29)	Percentage
High School Grades	22	75.9
Previous College Coursework	21	72.4
Student Self-Evaluation	14	48.3
Individual Interview	1	3.4
Assessment Instruments Only	1	3.4
Results of ACT, SAT Only	3	10.3
GED Scores When Applicable	1	3.4
Conference With Counselor	1	3.4

Student self-evaluation is an assessment consideration by 14 campuses (48.3%). Three colleges (10.3%) reported that the American College Test (ACT) and the Scholastic Aptitude Test (SAT) results are the only assessment consideration. Four other factors reported by one college each (3.4%) included: individual interview, conference with a counselor, General Education Diploma (GED) scores when applicable and available, and no factors considered other than the scores of assessment instruments. It is common for a college to use a combination of as many as three factors in assessing entering students.

Community College Programs That Are Not Open Admission

Table 6 lists community college programs which are not open admission by frequency and percentage. The most frequently appearing program reported by campuses as one which is not open admission was nursing. Nineteen campuses (65.5%) reported some form of selection criteria for nursing programs. Ten campuses (34.5%) reported selection criteria for paramedic and for emergency medical technician programs, 9 campuses (31%) reported dental hygiene programs, 8 more campuses reported respiratory therapy programs, 7 campuses (24.1%) reported medical laboratory technician programs, and 6 campuses (20.7%) reported radiology programs. Selection criteria also applied to cosmetology programs on 5 campuses (17.2%), physical therapist technician programs on 4 campuses

TABLE 6

Existing Community College Programs That Are Not Open Admission By Absolute Frequency and Percentage

Program	Absolute Frequency (N = 29)	Percentage
Nursing	19	65.5
Radiology	6	20.7
Nuclear Medicine	3	10.3
Opticianary Science and/or Vision Care Technician	2	6.9
Human Services	3	10.3
Dental Hygiene	9	31.0
Medical Lab Technician	7	24.1
Respiratory Therapy	8	27.6
Paramedic and/or Emergency Medical Technician	10	34.5
Professional Police Training and/or Police Science	2	6.9
Legal Assisting	1	3.4
Cardio-Pulmonary Technician	1	3.4
Nuclear Medicine Technician	1	3.4
Dental Assistant and/or Dental Technician	8	27.6
Physical Therapist Technician	4	13.8
Forest Technician	1	3.4

TABLE 6 continued

Golf Course Operations	1	3.4
Landscape Design and Sales and/or Ornamental Horticulture and Landscaping	2	6.9
Park Technology	1	3.4
Auto Body Repair and Repainting	1	3.4
Auto Mechanic, Auto Mechanic Specialist, Auto Performance Mechanic	2	6.9
Brick and Block Masonry	1	3.4
Cosmetology	5	17.2
Welding	1	3.4
Biomedical Equipment Technology	1	3.4
Veterinary Technician	1	3.4
Electroencephalographic Technician	1	3.4
Medical Record Technician	1	3.4
Small Gas Engine and Motorcycle Repair	2	6.9
Clerical Science	1	3.4
Data Processing	1	3.4
Retailing	1	3.4
Secretarial Science	2	6.9
Real Estate	1	3.4
Business	2	6.9
Junior Executive Marketing Management	1	3.4
Computer Programming	1	3.4
Operating Room Technology	2	6.9
Occupational Therapy Assistant	1	3.4

TABLE 6 continued

Professional Photography	1	3.4
Air Conditioning, Heating, and Refrigeration Technician	1	3.4
Architectural Woodworking	1	3.4
Electronics	1	3.4

(13.8%), nuclear medicine programs on 3 campuses (10.3%) and human services programs on 3 campuses. The following programs were reported by 2 campuses each (6.9%) as programs that were not open admission: opticianary science and/or vision care technician; professional police training and/or police science; landscape design and sales and/or ornamental horticulture and landscaping; auto mechanic; small gas engine and motorcycle repair; secretarial science; business; operating room technology. Many programs were reported by one college each (3.4%) as programs that were not open admission. They included: legal assisting; cardio-pulmonary technician; nuclear medical technician; forest technician; golf course operations; park technology; auto body repair and repainting; brick and block masonry; welding; biomedical equipment technology; veterinary technician; electroencephalographic technician, medical record technician; clerical science; data processing; retailing; real estate; junior executive marketing management; computer programming; occupational therapy assistant; professional photography; air conditioning, heating and refrigeration technician; architectural wood-working; and electronics.

Admissions Criteria for Programs That Are Not Open Admissions

Table 7 gives information on the admissions criteria used by colleges for programs that are not open admission. Sixteen campuses (55.2%) require that the applicant score

TABLE 7

Admissions Criteria Used by Colleges for Programs That Are Not Open Admission by Absolute Frequency and Percentage

Admissions Criteria Used by Colleges	Absolute Frequency (N = 29)	Percentage
Score on standardized test	16	55.2
Individual interview	9	31.0
Score on campus-produced test	1	3.4
Specific prerequisite requirements	12	41.4
Previous related work experience	2	6.9
Selection committee	9	31.0
Academic achievement criterion	12	41.4

above a specified score for admission to particular programs. Twelve campuses (41.4%) indicated academic achievement criteria as prerequisites to admission to particular programs. Another 12 campuses (41.4%) reported requiring other specific prerequisites (an example might be an English language examination requirement or medical examination report at the applicant's expense). Nine campuses (31.0%) used an individual interview as part of the admissions criteria and another 9 campuses reported the use of a selection committee. Two campuses (6.9%) reported a requirement of previous related work experience and one campus (3.4%) required a specific score on a campus-produced instrument.

Assessment Program Costs

Table 8 presents the assessment program cost data for each respondent. Estimated cost per student to the institution was reported to be $.50 or less by 19 campuses (65.5%). An additional 4 respondents reported the estimated cost to be between $.50 and $1.00. Therefore, 23 campuses (79.3%) estimated the cost per student to the institution to be $1.00 or less. Three colleges (Edison Community College, Hillsborough Community College, and South Florida Community College) reported costs to the institution of around $5.00 for standardized tests. Figures on cost to the institution include the purchase and scoring of instruments, and they do not include initial hardware costs or personnel costs.

TABLE 8

Estimated Cost Per Student of Assessment Programs

College	Estimated Cost Per Student to the Institution (Purchase and Scoring of Instruments)	Costs to Students
Brevard Community College	$.96	0
Broward Community College	negligible	0
Central Florida Community College	minimal	$7.50 (ACT)
Chipola Junior College	$1.00	0
Daytona Beach Community College	$.07	0
Edison Community College	$5.00 + (CGPT)	0
Florida Junior College at Jacksonville-Downtown	$.50	0
Florida Junior College at Jacksonville-Kent	MD	MD
Florida Junior College at Jacksonville-North	$.50	0
Florida Junior College at Jacksonville-South	$.15 (+ cost of reusable tests)	MD
Florida Keys Community College	$.50	MD
Gulf Coast Community College	0	$7.50 (ACT)
Hillsborough Community College	$4.75 (CGPT)	0
Indian River Community College	Unknown	specific programs $5.00 - $12.00
Lake City Community College	$.25	0

TABLE 8 continued

Lake-Sumter Community College	$.23	0
Manatee Junior College	0	$7.50 (ACT)
Miami-Dade Community College	$.25	0
North Florida Junior College	MD	$5.00 (ACT)
Okaloosa-Walton Junior College	0	$7.50 (ACT)
Palm Beach Junior College	$.22	$7.50 (ACT)
Pasco-Hernando Community College	$.10	0
Pensacola Junior College	$.51	Nursing $5.00 - $7.50
Santa Fe Community College	$.21	0
Seminole Community College	$.38	0
St. Petersburg Junior College	$.50 - $.60	0
South Florida Community College	$5.00 (SCAT)	0
Tallahassee Community College	$.25	Medical $12.00 - $15.00
Valencia Community College	$.50	0

MD - Missing Data

The only costs to the students were reported to be examination fees for national standardized tests. Six colleges reported requiring all students to pay ACT fees. Three colleges reported additional examination fees paid by students for admission to specific programs. These examination fees ranged from $5.00 to $15.00. Seventeen respondents (58.6%) reported assessment at no cost to the student.

Additional Areas of Assessment

Table 9 gives information on additional areas in which first-time-in-college students are assessed.

Study skills are assessed on 10 campuses (34.5%). However, 9 of these campuses make assessment optional to entering students. Only Valencia Community College required the assessment of study skills of entering students, where the instrument used is the college-produced Study Skills Assessment and Course Selection Guide.

Career interest is more often assessed. Seventeen colleges (58.6%) indicated that career interest assessment is offered to entering students. Only 2 campuses (6.9%) require career interest assessment; Brevard Community College uses its college-produced Brevard Community College Student Goals, and Gulf Coast Community College reported using the ACT Interest Inventory. The instrument most often used (though optional) is the Strong-Campbell Interest Inventory, used by 7 campuses (24.1%). Three campuses (10.3%) utilize

TABLE 9

Additional Areas in Which First-Time-In-College Students Are Assessed by Absolute Frequency and Percentage

Areas Assessed	Absolute Frequency (N = 29)	Percentage
Study Skills Assessment	10	34.5
Mandatory Assessment Instrument: Study Skills Assessment and Course Selection Guide (campus-produced-Valencia CC)	1	3.4
Non-mandatory Assessment	9	31.0
Career Interest Assessment	17	58.6
Mandatory Assessment Instrument: Brevard Community College Student Goals and ACT Interest Inventory (Gulf Coast CC)	2	6.9
Non-mandatory Assessment	15	51.7
Self-Concept Assessment	5	17.2
Mandatory Assessment	0	0
Non-mandatory Assessment	5	17.2

the ACT Interest Inventory. Other instruments reported by only one college each include the Hall Occupational Orientation Inventory, the Oliver Career and Educational Interest, and the Kuder.

Self-concept assessment was reported by 5 campuses (17.2%). At none of these campuses is this assessment mandatory for entering students.

Results of Survey of Entering Student Assessment Procedures:

Primary Assessment Instruments for Reading Comprehension

Twenty-one of the 29 respondents (72.4%) reported assessing reading comprehension of entering students. Fifteen of the total sample (51.7%) assess reading comprehension with a standardized, commercially available instrument, while 6 campuses (20.7%) assess reading comprehension with a campus-produced instrument. Of those campuses using standardized instruments, the Nelson Denny reading test was by far the most frequently reported, that being the choice of 7 campuses (24.1%). Other standardized tests reported by more than one college include the following: Comparative Guidance and Placement Test (CGPT) - 3 colleges (10.3%); Test of Adult Basic Education (TABE) - 2 colleges (6.9%); and the American College Test (ACT) - 2 colleges.

All 21 campuses assessing reading comprehension used the test results for counseling students into developmental reading courses. Six campuses required developmental reading courses for low-scoring students, but the majority of campuses (14 campuses) "strongly urged" low-scoring students to register for developmental courses. Only Lake City Community College reported using their reading assessment

instrument for exemption and credit by examination. Table 10 reports the results of assessment of reading comprehension by college, including the specific instruments used, the cut-off scores used for developmental course placement, and whether or not these instruments are standardized or campus-produced.

Primary Assessment Instruments for English Writing Ability

Fifteen of the 29 respondents (51.7%) reported assessing English writing ability of entering students. Eight of the total sample (27.6%) assess English writing skills with a campus-produced instrument or writing sample. Six campuses (20.7%) assess writing ability using a standardized instrument. The Comparative Guidance and Placement Test (CGPT) was reported by 3 colleges. The Test of Adult Basic English (TABE), the English Composition Test from the Florida Twelfth Grade Test, and the Scholastic Aptitude Test (SAT) were reported by one college each.

Fourteen of the 15 colleges assessing English writing ability reported using the test results for counseling students into developmental writing courses. Nine campuses strongly suggested that low-scoring students take developmental writing courses, while 6 colleges required low-scoring students to take the developmental writing courses. Chipola Junior College and Daytona Beach Community College reported also using their English writing assessment for placement of entering students into Honors English classes.

TABLE 10

Primary Assessment Instruments Used by Colleges for Reading Comprehension

College or Campus	Instrument Used	Standardized or Campus-Produced
Brevard Community College	Brevard Community College Assessment Program	CP
Broward Community College	Self-Assessment Program	CP
Daytona Beach Community College	Nelson Denny	S
Edison Community College	Comparative Guidance and Placement Test	S
Florida Jr. College at Jacksonville-Downtown	Nelson Denny	S
Florida Jr. College at Jacksonville-North	Nelson Denny	S
Florida Jr. College at Jacksonville-Kent	Nelson Denny	S
Florida Jr. College at Jacksonville-South	Nelson Denny	S
Gulf Coast Community College	ACT	S
Hillsborough Community College	Comparative Guidance and Placement Test	S
Lake City Community College	Nelson Denny Form B	S
Manatee Junior College	ACT	S

TABLE 10 extended

Results Used For Developmental Course Placement	Cut-Off Score For Developmental Course Placement	Used for Exemptions, Honors Courses, Credit by Exam
yes, strongly urged	raw score	no
yes, strongly urged	MD	no
yes, required	below grade level 10.5	no
yes, required	20%	no
yes, strongly urged	10th grade level	no
yes, strongly urged	10th grade level	no
yes, strongly urged	10, scale score	no
yes, strongly urged	10, scale score	no
yes	below 9th grade	no
yes, required	50%	no
yes, required	50%	above 50%, exemption and credit by exam
yes, strongly urged	18%-Developmental Reading	no

TABLE 10 continued

College or Campus	Instrument Used	Standardized or Campus-Produced
Miami-Dade Community College	ACT	S
Palm Beach Junior College	Reading Assessment	CP
Pasco-Hernando Community College	Test of Basic Education Level D	S
Pensacola Junior College	Nelson Denny	S
Santa Fe Community College	Test of Adult Basic Education Level D	S
Seminole Community College	Reading Assessment	CP
South Florida Community College	School and College Ability Test (SCAT)	S
St. Petersburg Junior College	Reading Assessment	CP
Valencia Community College	Reading Assessment	CP

S - Standardized Assessment Instrument

CP - Campus-produced Assessment Instrument

MD - Missing Data

TABLE 10 extended

Results Used For Developmental Course Placement	Cut-Off Score For Developmental Course Placement	Used for Exemptions, Honors Courses, Credit by Exam
yes, required	18, raw score	MD
yes, strongly urged	44, raw score	no
strongly urged	10th grade level	no
yes, strongly urged	varies	no
yes, strongly urged	58, raw score	no
yes, strongly urged	raw score	no
yes, required	45%	no
yes, strongly urged	25 of 30, raw score	MD
yes, strongly urged	0-25 of 30, raw score	no

Table 11 reports the results of assessment of English writing ability by college, including the specific instruments used, the cut-off scores used for developmental course placement, and whether or not these instruments are standardized or campus-produced.

Primary Assessment Instruments for English Usage

Nineteen of the 29 respondents (65.5%) reported assessing English usage of entering students. Eleven of the total sample (37.9%) assess English usage with a standardized commercially available instrument, while 8 colleges (27.6%) assess English usage with a campus-produced instrument. Of those using standardized instruments, the Comparative Guidance and Placement Test (CGPT) and the American College Test (ACT) were most commonly reported; 4 colleges reported each of these. Other standardized instruments reported by one college each include the Test of Adult Basic Education (TABE), the Descriptive Tests of Language Skills of the College Entrance Examination Board, and the Florida Twelfth Grade Test.

Test results were used to place students in developmental English courses. Responses were divided between colleges that required low-scoring students to take developmental English courses (7 colleges) and those who "strongly-urged" low-scoring students to take developmental English courses (9 colleges). Chipola Junior College reported using English assessment results to place students in Honors English classes

TABLE 11

Primary Assessment Instruments Used by Colleges for English Writing Ability

College	Instrument Used	Standardized or Campus-Produced
Brevard Community College	Brevard Community College Assessment Program	CP
Broward Community College	Self-Assessment Instrument	CP
Chipola Junior College	English Placement Test	CP
Daytona Beach Community College	English Assessment Test	CP
Edison Community College	Comparative Guidance and Placement Test	S
Hillsborough Community College	Comparative Guidance and Placement Test	S
Lake-Sumter Community College	English Qualification Test	CP
Miami-Dade Community College	Comparative Guidance and Placement Test	S
North Florida Junior College	Test of Standard Written English (SAT)	S
Palm Beach Junior College	English Composition Test (12th Grade Placement Test-ETS)	S
Pasco-Hernando Community College	Test of Adult Basic Education Level D	S
Pensacola Junior College	Writing Lab Placement Test	CP

TABLE 11 extended

Results Used For Developmental Course Placement	Cut-Off Score For Developmental Course Placement	Used for Exemptions, Honors Courses, Credit by Exam
yes, strongly urged	raw score	no
yes, strongly urged	MD	no
yes, required	quality of essay	Honors English
yes, required	raw score	Honors English
MD	20%	no
yes, required	50%	no
yes, required	quality of writing sample	no
yes, required	21, raw score	MD
yes, strongly urged	20%	no
yes, strongly urged	44, raw score	no
strongly urged	10th grade level	no
yes, strongly urged	37 of 60, raw score	no

TABLE 11 continued

College	Instrument Used	Standardized or Campus-Produced
Santa Fe Community College	Writing Sample	CP
Seminole Community College	English Assessment Test	CP
St. Petersburg Junior College	Language Skills Assessment	CP

S - Standardized Assessment Instrument

CP - Campus-produced Assessment Instrument

MD - Missing Data

TABLE 11 extended

Results Used For Developmental Course Placement	Cut-Off Score For Developmental Course Placement	Used for Exemption Honors Courses, Credit by Exam
yes, strongly urged	English Dept. Recommendation	no
yes, strongly urged	no scores used	no
yes strongly urged	33 of 35, raw score	MD

as well. Table 12 reports the results of assessment of English usage by college, including the specific instruments used, the cut-off scores used for placement in developmental English courses, and whether or not these instruments are standardized or campus-produced.

Primary Assessment Instruments for Mathematical Computation Skills

Twenty-four of the 29 respondents (82.8%) reported assessing mathematical computation skills of entering students. Fifteen of the total sample (51.7%) assess math computation skills with a standardized, commercially available instrument, while 9 campuses (31%) assess math computation skills with a campus-produced instrument. American College Test (ACT) scores were used by 4 colleges, the Comparative Guidance and Placement Test (CGPT) was used by 3. One college each reported using the Test of Adult Basic Education (TABE) and the Descriptive Tests of Math Skills of the College Entrance Examination Board.

Again, assessment results were used to place students in developmental math courses. Sixteen colleges urged low-scoring students to register for these courses, 5 colleges required them to do so. Only St. Petersburg Junior College reported using math assessment scores to allow students to exempt lower level courses. Table 13 reports the results of assessment of mathematical computation skills by college including the specific instruments

TABLE 12

Primary Assessment Instruments Used by Colleges for English Usage

College	Instrument Used	Standardized or Campus-Produced
Brevard Community College	Brevard Community College Assessment Program	CP
Broward Community College	Self-Assessment Instrument	CP
Central Florida Community College	ACT	S
Chipola Junior College	English Placement Test	CP
Edison Community College	Comparative Guidance and Placement Test	S
Florida Keys Community College	Comparative Guidance and Placement Test	S
Gulf Coast Community College	ACT	S
Hillsborough Community College	Comparative Guidance and Placement Test	S
Lake City Community College	Descriptive Tests of Language Skills (CEEB)	S
Lake-Sumter Community College	English Qualification Test	CP
Manatee Junior College	ACT	S
Miami-Dade Community College	Comparative Guidance and Placement Test	S
Okaloosa-Walton Junior College	ACT or SAT (voluntary)	S

TABLE 12 extended

Results Used For Developmental Course Placement	Cut-Off Score For Developmental Course Placement	Used for Exemptions, Honors Courses, Credit by Exam
yes, strongly urged	raw score	no
yes, strongly urged	MD	no
MD	MD	MD
yes, required	47, raw score	Honors English
MD	20%	no
yes, required	varies	no
yes, required	17, scale score	MD
yes, required	50%	no
yes, required	33, raw score	no
yes, required	30, raw score	no
yes, strongly urged	46%-Basic English	no
yes, required	21, raw score	MD
MD	MD	MD

TABLE 12 continued

College	Instrument Used	Standardized or Campus-Produced
Palm Beach Junior College	English Composition Test (12th grade Placement Test - ETS)	S
Pasco-Hernando Community College	Test of Adult Basic Education Level D	S
Seminole Community College	English Assessment Test	CP
St. Petersburg Junior College	Language Skills Assessment Test	CP
Tallahassee Community College	English Diagnostic Inventory	CP
Valencia Community College	English Assessment and Course Selection Guide	CP

S - Standardized Assessment Instrument

CP - Campus-produced Assessment Instrument

MD - Missing Data

TABLE 12 extended

Results Used For Developmental Course Placement	Cut-Off Score For Developmental Course Placement	Used for Exemption Honors Courses, Credit by Exam
yes, strongly urged	44, raw score	no
strongly urged	10th grade level	no
yes strongly urged	no scores used	no
yes, strongly urged	33 of 35, raw score	MD
yes, strongly urged	50, raw score	no
yes, strongly urged	0-17 of 35, raw score	no

TABLE 13

Primary Assessment Instruments Used by Colleges for Mathematical Computation Skills

College	Instrument Used	Standardized or Campus-Produced
Brevard Community College	Brevard Community College Assessment Program	CP
Broward Community College	Self-Assessment Instrument	CP
Central Florida Community College	ACT	S
Chipola Junior College	Math Assessment Test	CP
Daytona Beach Community College	Math Assessment Test	CP
Edison Community College	Comparative Guidance and Placement Test	S
Florida Junior College at Jacksonville-Downtown	Richardson Math Test	CP
Florida Junior College at Jacksonville-Kent	Richardson Math Test	CP
Florida Junior College at Jacksonville-North	Richardson Math Test	CP
Gulf Coast Community College	ACT	S
Hillsborough Community College	Comparative Guidance and Placement Test	S
Indian River Community College	Math Assessment Test	CP

TABLE 13 extended

Results Used For Developmental Course Placement	Cut-Off Score For Developmental Course Placement	Used for Exemption Honors Courses Credit by Exam
yes, strongly urged	raw score	no
yes, strongly urged	MD	no
MD	MD	MD
yes, required	70%	no
yes, required	raw score	no
MD	20%	no
yes, strongly urged	9, raw score	no
yes, strongly urged	10, scale score	no
yes, strongly urged	9, raw score	no
yes, required	below 14, scale score	MD
yes, required	50%	no
yes, strongly urged	varies by course	no

TABLE 13 continued

College	Instrument Used	Standardized or Campus-Produced
Lake City Community College	Descriptive Tests of Math Skills (CEEB)	S
Manatee Junior College	ACT	S
Miami-Dade Community College	Comparative Guidance and Placement Test	S
Okaloosa-Walton Junior College	ACT or SAT (voluntary)	S
Palm Beach Junior College	Math Assessment Test	CP
Pasco-Hernando Community College	Test of Adult Basic Education Level D	S
Pensacola Junior College	General Math and Algebra Placement Test	CP
Santa Fe Community College	Math Assessment Test	CP
Seminole Community College	Math Assessment Test	CP
St. Petersburg Junior College	Orientation and Placement Testing-Math Test	CP
Tallahassee Community College	Math Placement Inventory	CP
Valencia Community College	Math Self-Assessment Course Selection Guide	CP

S - Standardized Assessment Instrument

CP - Campus-produced Assessment Instrument

MD - Missing Data

TABLE 13 extended

Results Used For Developmental Course Placement	Cut-Off Score For Developmental Course Placement	Used for Exemption Honors Courses Credit by Exam
yes, strongly urged	22, raw score	no
yes, strongly urged	18%-Basic Math	no
yes, required	24, raw score	MD
MD	MD	MD
yes, strongly urged	6, raw score	no
strongly urged	10th grade level	no
yes, strongly urged	13 of 20, raw score	no
yes, strongly urged	0-10 of 20, raw score	no
yes, strongly urged	raw score	no
yes, strongly urged	raw score	exemptions
yes, strongly urged	raw score	no
yes, strongly urged	0-5 of 18, raw score	no

used, the cut-off scores used for developmental course placement, and whether or not these instruments are standardized or campus-produced.

Student Groups Assessed by Primary Assessment Instruments

Table 14 shows the breakdown of specific student groups that are assessed in each subject area. Returning students and students transferring from other colleges were administered assessment instruments less often than were first-time-in-college students. Occupational students were more often assessed than were advanced and professional students or students with other personal objectives. Full-time students were assessed more often than part-time students. There was little variation among the last four categories of students in how frequently they were assessed. These four groups included concurrent high school/college enrollees, early college admits (academically superior students), international students, and non-high school graduates.

Primary Assessment Instrument Selection

Table 15 indicates by whom primary assessment instruments were selected as appropriate assessment tools. The selection of assessment instruments most often involved faculty members of the subject area. Least often the decision was made by a single individual, such as a chairperson or academic dean.

Selection Factors for Primary Assessment Instruments

Table 16 presents data on the factors considered in instrument selection. Cost, ease of administration, availability,

TABLE 14

Student Groups Assessed by Primary Assessment Instruments For Each Subject Area by Absolute Frequency and Percentage

	Reading Comprehension	
Student Groups	Absolute Frequency (N = 29)	Percentage
First-Time-In-College Students	21	72.4
Returning Students	6	20.7
Transfer Students	11	37.9
Advanced and Professional Students	10	34.5
Occupational Students	16	55.2
Students With Other Personal Objectives	9	31.0
Full-Time Students	20	69.0
Part-Time Students	18	62.1
Current High School/College Enrollees	13	44.8
Early College Admits	2	41.4
International Students	15	51.7
Non-High School Graduates	15	51.7

TABLE 14 extended

English Writing Skills		English Usage		Math Computation Skills	
Absolute Frequency (N = 29)	Percentage	Absolute Frequency (N = 29)	Percentage	Absolute Frequency (N = 29)	Percentage
13	44.8	12	41.4	24	82.8
5	17.2	7	24.1	7	24.1
8	27.6	8	27.6	14	48.3
5	17.2	9	31.0	12	41.4
9	31.0	12	41.4	19	65.5
6	20.7	10	34.5	12	41.4
12	41.4	12	41.4	24	82.8
9	31.0	11	37.9	20	69.0
11	37.9	11	37.9	15	51.7
9	31.0	11	37.9	16	55.2
10	34.5	11	37.9	18	62.1
8	27.6	10	34.5	16	55.2

TABLE 15

Group or Individual Selecting Primary Assessment Instruments For Each Subject Area by Absolute Frequency and Percentage

	Reading Comprehension	
Group or Individual	Absolute Frequency (N = 29)	Percentage
Chairperson of Subject Area Department	3	10.3
Subject Area Faculty Members	7	24.1
Administrators	2	6.9
Student Services or Student Development Personnel	4	13.8
Learning Lab Personnel	2	6.9
Committee	6	20.7
President's Council	1	3.4
Testing and Research Personnel	1	3.4
Content Area Specialists	1	3.4
Academic Dean	0	0.0

TABLE 15 extended

English Writing Skills		English Usage		Math Computation Skills	
Absolute Frequency (N = 29)	Percentage	Absolute Frequency (N = 29)	Percentage	Absolute Frequency (N = 29)	Percentage
1	3.4	1	3.4	3	10.3
9	31.0	7	24.1	14	48.3
1	3.4	2	6.9	4	13.8
1	3.4	3	10.3	3	10.3
0	0.0	1	3.4	1	3.4
3	10.3	2	6.9	7	24.1
1	3.4	0	0.0	1	3.4
2	6.9	1	3.4	1	3.4
1	3.4	0	0.0	1	3.4
1	3.4	1	3.4	0	0.0

TABLE 16

Selection Factors for Primary Assessment Instruments for Each Subject Area by Absolute Frequency and Percentage

	Reading Comprehension	
Selection Factor	Absolute Frequency (N = 29)	Percentage
Cost	14	48.3
Ease of Administration	17	58.6
Availability	17	58.6
Congruence with Instructional Goals	15	51.7
Predictability	13	44.8
No Cost to Students	1	3.4

TABLE 16 extended

English Writing Skills		English Usage		Math Computation Skills	
Absolute Frequency (N = 29)	Percentage	Absolute Frequency (N = 29)	Percentage	Absolute Frequency (N = 29)	Percentage
8	27.6	9	31.0	17	58.6
9	31.0	9	31.0	19	65.5
10	34.5	9	31.0	18	62.1
10	34.5	10	34.5	17	58.6
9	31.0	7	24.1	17	58.6
0	0.0	0	0.0	0	0.0

congruence with instructional goals, and predictability were all highly considered. "No cost to students" was mentioned in only one instance.

Factors Determining Cut-Off Scores for Placement

Table 17 provides information on how cut-off scores are determined for the placement of students in developmental courses. Determination by "other professional judgements" was more frequent than "research based" or "campus norming". The majority of responses were grouped around these three factors.

Additional Instruments

Very few additional instruments were reported as a standard part of an assessment program. Some colleges, such as Broward Community College, indicated that they also considered standardized test scores (such as SAT and ACT) in addition to their own campus-produced assessment scores when standardized scores were available. The most frequently reported secondary or additional assessment instrument was the use of a specific instrument for international students. Miami-Dade Community College reported the use of the Michigan Placement Test for non-native speakers. Use of the Test of English as a Foreign Language (TOEFL) was reported by Manatee Junior College, Seminole Community College and South Florida Community College. Valencia Community College reported using the English Language Proficiency Test.

Only Central Florida Community College reported requiring the assessment of science and social science.

TABLE 17

Absolute Frequency and Percentage of Factors Determining Cut-Off Scores for Placement of Students in Developmental Courses for Each Subject Area

	Reading Comprehension	
Determining Factor	Absolute Frequency (N = 29)	Percentage
Research Based	4	13.8
Campus Norming	5	17.2
National Recommendation for Two-Year Schools	1	3.4
Past Performance and Predictability	1	3.4
Adopted From Another College	0	0.0
Departmental Decision Based on Placement Tests Used in the Past	1	3.4
Committee Decision	1	3.4
Other Professional Judgements	8	27.6

TABLE 17 extended

English Writing Skills		English Usage		Math Computation Skills	
Absolute Frequency (N = 29)	Percentage	Absolute Frequency (N = 29)	Percentage	Absolute Frequency (N = 29)	Percentage
4	13.8	2	6.9	7	24.1
2	6.9	3	10.3	5	17.2
0	0.0	0	0.0	0	0.0
1	3.4	0	0.0	3	10.3
0	0.0	1	3.4	0	0.0
0	0.0	1	3.4	1	3.4
2	6.9	1	3.4	1	3.4
4	13.8	3	10.3	7	24.1

Results in these two areas are obtained through the use of the ACT, which is Central Florida's primary assessment tool for math and English usage.

Results of Entering Student Assessment Opinionnaire

The Entering Student Assessment Opinionnaire was used to appraise the perceptions of community college student assessment program coordinators regarding the issues related to assessment programs in Florida community and junior colleges. One hundred percent return was received on this mail out, resulting in a total of 33 responses, one from each of the 28 community and junior colleges and an additional five responses from multi-campus colleges.

Items. The opinionnaire consisted of 33 items. Item 1 requested the respondent's position with the community college, and item 2 asked for the respondent's degree of involvement in the assessment program for entering students. Items 3 through 33 addressed the objectives of assessment, who should decide what assessment programs should be, what the programs should be like, how results should be used, how these programs should be administered and program evaluation. The following Likert type scale was used for items 3 through 30: Strongly Agree -- 5; Agree -- 4; No Opinion -- 3; Disagree -- 2; and Strongly Disagree -- 1.

Table 18 categorizes the respondents of the opinionnaire by their position with the community college. Twenty-three

TABLE 18

Response of Sample to Position With the Community College By Absolute Frequency and Percentage

N = 33 Position	Absolute Frequency	Percentage
Full-Time Faculty Member	4	12.1
Instructor With Additional Administrative Responsibilities	1	3.0
Full-Time Administrator	23	69.7
Professional Staff	5	15.2

of the thirty-three (69.7%) are full-time administrators. Five respondents (15.2%) are part of their college's professional staff. Four respondents (12.1%) identified themselves as full-time faculty members. One respondent fell into the category of "instructor with additional administrative duties."

Table 19 indicates the extent of involvement in the assessment program for entering students as expressed by the respondents. A high degree of involvement was expressed by 27 of the 33 respondents; 45.5% indicated that they coordinated their college's assessment program, and an additional 36.4% identified assessment as their major responsibility at the college. Five respondents (15.2%) indicated their role as a participant in the assessment of entering students. One respondent indicated that involvement with assessing entering students is minimal.

Table 20 presents the absolute frequencies, means, medians and standard deviations of the responses from the entire sample on items 3 through 33. Item 6, which suggests that the assessment of entering students is beneficial in college program planning, had the highest mean (4.52) and median (4.81). Very high agreement (a mean of 4.42 and a median of 4.75) was indicated on item 3, which proposes that all Florida community colleges should have an assessment program for entering students. Very strong agreement

TABLE 19

Response of Sample to Extent of Involvement in the Assessment Program for Entering Students by Absolute Frequency and Percentage

N = 33 Extent of Involvement	Absolute Frequency	Percentage
Minimal Involvement	1	3.0
Participant	5	15.2
Coordinator of Assessment	15	45.5
Major Responsibility at College	12	36.4

TABLE 20

Responses of Sample to Entering Student Assessment Opinionnaire By Absolute Frequency, Mean, Median, and Standard Deviation

Item	Absolute Frequency (N = 33)	Mean	Median	Standard Deviation
3	33	4.42	4.75	1.091
4	33	2.91	2.39	1.422
5	33	2.42	2.04	1.393
6	33	4.52	4.81	1.004
7	33	4.39	4.53	0.788
8	33	4.24	4.53	1.032
9	32	2.31	1.96	1.401
10	33	2.39	2.15	1.171
11	33	4.42	4.68	0.936
12	32	3.69	3.90	1.120
13	33	4.30	4.46	0.918
14	33	2.39	2.11	1.171
15	33	3.46	3.80	1.201
16	33	3.46	3.78	1.148
17	33	3.91	4.12	1.128
18	33	3.85	4.00	0.939
19	33	4.21	4.29	0.893
20	33	4.06	4.09	0.704

TABLE 20 continued

Item	Absolute Frequency (N = 33)	Mean	Median	Standard Deviation
21	33	4.24	4.63	0.902
22	33	3.18	3.62	1.310
23	33	4.18	4.32	0.950
24	33	4.42	4.75	1.091
25	33	3.76	3.90	1.001
26	33	2.46	2.20	1.092
27	33	2.49	2.20	1.202
28	33	3.76	4.05	1.275
29	33	4.24	4.46	0.969
30	33	4.06	4.18	0.966
31	33	3.39	3.75	1.273
32	33	3.06	3.10	1.243
33	33	2.85	3.00	1.372

was expressed on item 24 (mean of 4.42 and median of 4.75), which suggests that no Florida resident with a high school diploma or a GED should be denied admission to a Florida community college as a result of assessment scores. Very high agreement was also expressed on item 11 (mean of 4.42 and median of 4.68), which proposes that one of the purposes of student assessment is to help identify student strengths as well as weaknesses. High agreement was indicated on item 7 (mean of 4.39 and median of 4.53), which suggests that the primary purpose of assessment programs is placement of students in courses appropriate to their skill level.

Definite agreement was shown by a mean of 4.30 and a median of 4.46 on item 13, which proposes that community college faculties should be actively involved in deciding what their college's assessment program will be. A mean of 4.24 was indicated on each of items 8, 21, and 29, which suggests that assessment enhances retention, that student assessment should serve as a basis for advisement of students, and that assessment instruments should be administered during the admissions/pre-registration period. Other items expressing agreement (a mean of 4.0 or above) include item 19, (mean of 4.21) which proposes that assessment of basic skills should be required of all students in vocational programs; item 23, (mean of 4.18), which proposes that scores used for placement of students should be research based; and item 30 (mean of 4.06) which suggests that it is important to empirically validate assessment programs.

Means of 3.50 to 4.0 indicate that the respondents tend to agree with the item. This positive indication is reflected in item 12 (mean of 3.69), which proposes that assessment programs may also be an indicator of educational accountability; item 17 (mean of 3.91), which suggests that student assessment programs should consider previous coursework and grade point averages; item 18 (mean of 3.85), which proposes that community characteristics should have a major influence on the development of a community college's student assessment program; item 25 (mean of 3.76), which suggests that no student who has successfully completed the coursework for an associate degree should be denied the degree due to low exit assessment scores; and item 28 (mean of 3.76), which proposes that the state should assume the cost of assessing the students. A mean of 3.50 or above was reflected in the response of 54.5% of the items.

The lowest mean was indicated on item 9 (mean of 2.31 and median of 1.96), which suggests that assessment increases attrition. Item 10 was similarly low (mean of 2.39 and median of 2.15) in its suggestion that assessment increases "no shows." Also low was item 14 (mean of 2.39 and median of 2.11), which proposes that students should be selected for all programs based on assessment scores. Disagreement was expressed to item 5 (mean of 2.42), which suggests that all Florida community colleges should be required to use the same placement criteria and "cut-off" scores; item 26 (mean of 2.46),

which proposes that students should pay the costs of their assessments; and item 27 (mean of 2.49), which suggests that the community college should absorb the cost of assessing students. Two additional items had a mean below 3.0. Item 4, which proposes that assessment instruments, practices, and policies should be standardized throughout the state, had a mean of 2.91. Item 33, which suggests that the assessment programs tend to be discriminatory to minority students, had a mean of 2.85.

Responses of the sample to item 3 through 33 by absolute frequency and by relative frequency (Table 21) indicate that item 9 produced the most negative reaction. Item 9, "assessment increases attrition" resulted in 33.3% of the respondents disagreeing and 33.3% strongly disagreeing. Item 10 produced a similarly negative reaction in that 39.4% of the respondents disagreed and 24.2% strongly disagreed with the statement "assessment increases 'no shows'." Item 5, "all Florida community colleges should be required to use the same placement criteria and cut-off scores" resulted in 36.4% of the respondents disagreeing and 30.3% strongly disagreeing. A negative reaction resulted from item 14, "students should be selected for all programs based on assessment scores," which had 42.4% disagreeing and 24.2% strongly disagreeing. Item 26, "students should pay the cost of their assessments" and item 27, "the community college should absorb the cost of assessing students" each resulted in 45.5% disagreeing and 18.2% strongly disagreeing.

TABLE 21

Responses of Sample to Entering Student Assessment Opinionnaire By Absolute Frequency and Percentage of Scale Choices

N = 33	Strongly Disagree		Disagree	
Item	Absolute Frequency	Percentage	Absolute Frequency	Percentage
3	2	6.1	1	3.0
4	5	15.2	13	39.4
5	10	30.3	12	36.4
6	1	3.0	2	6.1
7	0	0.0	2	6.1
8	1	3.0	2	6.1
9	11	33.3	11	33.3
10	8	24.2	13	39.4
11	1	3.0	1	3.0
12	2	6.1	3	9.1
13	1	3.0	1	3.0
14	8	24.2	14	42.4
15	1	3.0	10	30.3
16	1	3.0	9	27.3
17	2	6.1	3	9.1
18	0	0.0	5	15.2
19	1	3.0	1	3.0
20	0	0.0	2	6.1

TABLE 21 extended

No Opinion		Agree		Strongly Agree	
Absolute Frequency	Percentage	Absolute Frequency	Percentage	Absolute Frequency	Percentage
0	0.0	8	24.2	22	66.7
1	3.0	8	24.2	6	18.2
2	6.1	5	15.2	4	12.1
0	0.0	6	18.2	24	72.7
0	0.0	14	42.4	17	51.5
2	6.1	11	33.3	17	51.5
4	12.1	1	3.0	5	15.2
4	12.1	7	21.2	1	3.0
1	3.0	10	30.3	20	60.6
5	15.2	15	45.5	7	21.2
1	3.0	14	42.4	16	48.5
1	3.0	10	30.3	0	0.0
1	3.0	15	45.5	6	18.2
2	6.1	16	48.5	5	15.2
1	3.0	17	51.5	10	30.3
2	6.1	19	57.6	7	21.2
1	3.0	17	51.5	13	39.4
1	3.0	23	69.7	7	21.2

TABLE 21 continued

N = 33 Item	Strongly Disagree		Disagree	
	Absolute Frequency	Percentage	Absolute Frequency	Percentage
21	1	3.0	1	3.0
22	3	9.1	11	33.3
23	1	3.0	1	3.0
24	2	6.1	1	3.0
25	1	3.0	3	9.1
26	6	18.2	15	45.5
27	6	18.2	15	45.5
28	2	6.1	5	15.2
29	1	3.0	1	3.0
30	1	3.0	2	6.1
31	3	9.1	7	21.2
32	3	9.1	10	30.3
33	8	24.2	6	18.2

TABLE 21 extended

No Opinion		Agree		Strongly Agree	
Absolute Frequency	Percentage	Absolute Frequency	Percentage	Absolute Frequency	Percentage
0	0.0	12	36.4	19	57.6
1	3.0	13	39.4	5	15.2
3	9.1	14	42.4	14	42.4
0	0.0	8	24.2	22	66.7
6	18.2	16	48.5	7	21.2
3	9.1	9	27.3	0	0.0
5	15.2	4	12.1	3	9.1
4	12.1	10	30.3	12	36.4
3	9.1	12	36.4	16	48.5
2	6.1	17	51.5	11	33.3
3	9.1	14	42.4	6	18.2
5	15.2	10	30.3	4	12.1
5	15.2	11	33.3	3	9.1

Items 14 and 26 were the only two items to which no respondent strongly agreed. Thirty of the 33 respondents agreed or strongly agreed with item 6, "assessment of entering students is beneficial in college program planning." The relative frequency of those agreeing was 18.2%, and the frequency of those who strongly agreed was 72.7%. Item 24, "no Florida resident with a high school diploma or a GED should be denied admission to a Florida community college as a result of assessment scores," produced high agreement; 66.7% strongly agreed and 24.2% agreed. Item 11 was another high agreement item; 60.6% of the respondents strongly agreed and 30.3% agreed with "one of the purposes of student assessment is to help identify student strengths as well as weaknesses." Item 25, "no student who has successfully completed the coursework for an associate degree should be denied the degree due to low exit assessment scores," was the statement that received the most frequent "no opinion" response; 18.2% responded "no opinion".

SUMMARY AND DISCUSSION

The Current State of Student Assessment Programs

Data collected from the Survey of Entering Student Assessment Procedures (Appendix A) show that assessment programs at the community and junior colleges across the state vary in all dimensions including what skill areas are assessed with what instruments, who selects these instruments, the objectives and uses of the results of assessment, cost and administration of assessment, which specific student groups are assessed, and requirements for admission into selective admission programs.

Assessment programs focus on the assessment of communication and computation skills as evidenced by the following: 24 campuses assess mathematical computation skills, 21 campuses assess reading comprehension, 19 campuses assess English usage, and 15 campuses assess English writing ability of incoming students. Only two respondents reported that their programs assess science and one campus reported that its assessment program assessed in the area of social science. With this basic focus as the foundation of assessment programs, much diversity can be noted between and among community college campuses in the processes of assessing students.

Administration of Assessment. Only one college (Okaloosa-Walton Junior College) reported that all assessment is voluntary. Twenty-two campuses indicated that "all students

take the same assessment instruments"; that is, these colleges apply the same assessment procedure to all students entering that particular college. Six colleges vary their procedure somewhat according to course selection or course background. It appears that assessment results have much more to do with course selection than vice versa.

Thirteen different methods for administering assessment instruments were reported. These included various methods of group and individual assessment as well as a mail-home self-scoring assessment and reliance on national testing dates for standardized instruments. By far, the preferred approach, used by 19 campuses, appears to be assessment in groups at orientation or pre-registration.

Only one college reported that its assessment program relies solely on the results of tests. High school grades and previous college coursework appear to be the preferred accessories to scores on instruments. Nearly half of the respondents reported using student self-evaluation as a part of the assessment procedure. These results indicate that assessment is not limited to testing.

Selective Admission Programs. Forty-three different selective admission programs were reported by the community colleges. These were, in all cases, vocational/occupational programs. The most frequently reported selective admission program was nursing, reported by 19 campuses. More than half of the colleges reporting selective admissions programs use

standardized test scores as part of the selection criteria. Twelve campuses reported an "academic achievement criterion" as a selection requirement. Interviews with applicants and selection committees appear to be a common approach to selection. The category of "specific prerequisite requirements" included requirements too numerous and varied to list. One paragraph from one community college catalog for eligibility for admission to its Emergency Medical Technology and Paramedic programs will serve as an illustration.

> Paramedic students must possess a high school diploma or equivalent and a current State of Florida EMT Certificate; have a minimum of one year's experience in emergency care; must have been employed by an emergency services unit for at least six months or 1000 hours during the year prior to enrollment. Students must be free of any physical or mental defects or diseases which might impair the student's ability to care for a sick or injured person and be free of any addiction to alcohol or any harmful drug (presently and throughout the duration of the program).
>
> In addition to the above, paramedic students must complete an application for admission; and must be interviewed by the Paramedic Program Selection Committee. Upon notification of tentative acceptance the applicant must submit to a physical performance test and a physical examination by a physician approved by the selection committee.

Responses to this item were indicative of the variety and subjectivity of approaches utilized in the selection of students for limited admission programs. Where space is limited and accountability demands are put on programs,

community college personnel will of course select those students whom they feel will most likely succeed in the program. However, such subjectivity allows for the possibility of discriminatory selection procedures.

Cost Data. The estimated cost per student (to the institution) of the assessment program ranged from zero to as much as $5.00 for standardized instruments. Only three of the 29 campuses reported cost per student to the institution to be above $1.00. Figures on cost to the institution include the purchase and scoring of instruments, and they do not include initial hardware costs or personnel costs. Even so, the results indicate that generally, assessment programs as they now exist are not a great expense to the college.

Where national standardized tests were required, in nearly every case, the student paid the fee, such as the $7.50 ACT fee. Specific programs often required additional tests. Tallahassee Community College illustrates this practice, where the cost to the institution was reported as $.25 per student, but aptitude test fees were reported to be $12.00 per student for the nursing program, $13.00 per person for the dental hygiene program, and $15.00 per person for the radiology program. It would seem that in cases where assessment instruments are required for admission and the cost is assumed by the student, that these assessment fees could operate as a barrier to equal access.

Additional Areas of Assessment. Study skills, career interest, and self-concept were additional areas of assessment

that were surveyed. Many respondents commented that their colleges had instruments available (and sometimes mini-courses) in these areas, but rarely were these routinely administered to all first-time-in-college students. Only Valencia Community College required the assessment of study skills of entering students, where the instrument used was the college-produced Study Skills Assessment and Course Selection Guide. Only two colleges reported requiring the assessment of career interest of entering students; Brevard Community College uses its college-produced Brevard Community College Student Goals, and Gulf Coast Community College reported using the ACT Interest Inventory. Mandatory assessment of self-concept was not reported by any respondent, though it was often available to students. Thus, these three areas were generally not viewed as necessary areas in which to assess entering students.

Subject Area Assessment. Twenty-one of the 29 respondents reported assessing reading comprehension of entering students. Fifteen campuses assess reading comprehension with a standardized, commercially available instrument, while 6 campuses assess reading comprehension with a campus-produced instrument. Of those campuses using standardized instruments, the Nelson Denny reading test was by far the most frequently reported, that being the choice of 7 campuses.

Fifteen of the 29 respondents reported assessing English writing ability of entering students. Eight campuses assess

English writing skills with a campus-produced instrument or writing sample. Six campuses assess writing ability using a standardized instrument. The most commonly used standardized instrument is the Comparative Guidance and Placement Test (CGPT), reported by three colleges.

Nineteen of the 29 respondents reported assessing English usage of entering students. Eleven of the total sample assess English usage with a standardized, commercially available instrument, while eight colleges assess English usage with a campus-produced instrument. Of those using standardized instruments, the Comparative Guidance and Placement Test (CGPT) and the American College Test (ACT) were most commonly reported; four colleges reported each of these.

Twenty-four of the 29 respondents reported assessing mathematical computation skills of entering students. Fifteen of the total sample assess math computation skills with a standardized, commercially available instrument, while nine campuses assess math computation skills with a compus-produced instrument. The most commonly reported standardized instruments were the American College Test (ACT), reported by four colleges, and the Comparative Guidance and Placement Test (CGPT), used by three colleges.

These results indicate that more colleges assess mathematical computation skills than any other subject area. Standardized instruments are more often used than

campus-produced instruments in assessing math skills. Reading comprehension is the next most commonly assessed subject area; standardized measures are more often used than campus-produced instruments. More than half of the respondents assess in the area of English usage. Again standardized measures are more often used than campus-produced instruments. Slightly more than half of the respondents reported assessing English writing ability. Only in this subject area do more campuses use a campus-produced instrument. Some colleges assess in either English usage or English writing ability, while other colleges use a single instrument to cover both areas.

There are several possible reasons for the use of so many campus-produced instruments. One reason might be that there may be so much diversity in needs among colleges that campus-produced instruments serve these needs better than do existing published tests. Congruence with instructional goals, cost, and availability may also be factors involved in the use of campus-produced instruments.

Use of Results. Assessment scores are generally used for course placement. In all four subject areas, scores on instruments are much more often used to advise students and suggest course placement than to require students to be placed in developmental courses. Which approach is used appears to be related to colleges' perceptions of the goals

of assessment. If, in fact, one of the goals is to assist students in making realistic decisions, then use of results to place students in courses ignores that goal. However, appropriate course placement is more likely to result in a successful experience for the student. Some colleges commented that students tend to register for the courses that they are advised to take, but that when the advice is given as a mandate, it is sometimes responded to with rebellion and insolence.

Who Is Assessed. Results indicated much variation in who is assessed. Most first-time-in-college students are assessed if they are full-time degree-seeking students. "Students with other personal objectives" are much less often assessed at entry. Transfer students are more likely to be advised based on their achievement in previous college courses, but sometimes they too are given assessment instruments. Returning students are least often assessed. A number of colleges indicated that all degree-seeking students are assessed, while students who are not in degree programs are likely never to be assessed. Policies pertaining to who is assessed appear to have many variations between and among both subject areas and colleges.

Selection of Assessment Instruments. There is also variation as to who selected primary assessment instruments as appropriate tools. The selection of assessment instruments

most often involved faculty members of the subject area. Least often the decision was made by a single individual, such as a chairperson or academic dean. Sometimes the decision was shared between faculty members and administrators. The procedure often was not the same from subject area to subject area within a given college.

In all four assessment areas, no one selection factor appeared to be given significantly more consideration in the selection process than others. Cost, ease of administration, availability, congruence with instructional goals, and predictability were all highly considered. It appears that colleges generally want assessment measures that are low-cost in both purchase and scoring, quick, easily administered, and easily scored in order that results are not delayed.

Determination of Cut-Off Scores. Colleges also varied in their process of determining cut-off scores for the placement of students in developmental courses. Determination by "other professional judgements" was more frequent than "research based" or "campus norming." The majority of responses were grouped around these three factors. Professional judgements often appeared to be fairly arbitrary, as this category included such comments as "this was a decision by the math faculty," or "the committee who developed the exam decided on the cut-off." These results point toward the need for more of a research base in the determination of cut-off scores for developmental course placement.

Additional Uses of Assessment. The results of primary assessment instruments were seldom used for exemptions, honors courses, or credit by examination. Some colleges did, however, note that they used the College Level Exemption Program (CLEP) for purposes of exemption and credit by examination.

Perceptions of Program Coordinators Toward Assessment Policies and Procedures

The data collected from the Entering Student Assessment Opinionnaire show that 70% of the respondents are full-time administrators, 15% are on the college's professional staff, 12% are full-time faculty members, and 3% are combined instructor/administrator positions. The level of involvement of 86% of the respondents was indicated as either "coordinator of assessment" or "major responsibility at college." The remaining respondents identified their role as that of a participant in the student assessment program. Since "participants" tended to be from colleges utilizing national test scores as their primary means of assessment, these data seem to indicate that the effort of the researcher to identify those persons most closely associated with the formulation and application of student assessment procedures was generally successful. Therefore, the opinions expressed in this portion of the study should be representative of those at the core of student assessment in Florida and not merely of "interested persons."

The results of the opinionnaire strongly indicate that the respondents do agree that all Florida community colleges should have an assessment program for entering students. Opinion is divided as to whether or not assessment instruments, practices, and policies should be standardized throughout the state, but more than half of the respondents are against standardization. There is, however, disagreement with requiring the use of the same placement criteria and cut-off scores. These results indicate that community colleges appear to support the existence of assessment of entering students, but that they generally prefer to retain local autonomy as opposed to centralized control of assessment.

Items 6 through 12 focused on the purposes of assessment programs. These results indicate much agreement that the assessment of entering students is beneficial in college program planning. A mean of 4.39 on item 7 indicated that respondents did view the primary purpose of assessment programs as placement of students in courses approriate to their skill level. Respondents agreed that assessment enhances retention and disagreed that assessment increases attrition and "no shows." There was high agreement that one of the purposes of student assessment is to help identify student strengths as well as weaknesses. Results show a tendency toward agreement (mean of 3.69) with the statement "assessment programs may also be an indicator of accountability."

The results of item 13 indicated strong agreement that community college faculties should be actively involved in deciding what their college's assessment program will be.

A mean of 3.46 on item 15 indicated that respondents tend to agree that students should be selected for limited enrollment programs based on assessment scores. The results of item 14 were divided but indicate a tendency against using assessment scores for student selection for all programs (mean of 2.39).

Items 16 through 23 surveyed the opinions of respondents as to what assessment programs should be like. Opinions were divided as to whether or not assessment should include personal characteristics (such as motivation) in addition to cognitive skills, but there was a tendency to agree that it should (mean of 3.46). Some commented that they would like assessment to include personal characteristics, but that the practical problems of assessing these characteristics made it most difficult to do so. The respondents agreed that student assessment programs should consider previous course-work and grade point averages. There was agreement (mean of 3.85) that community characteristics (such as student clientele, instructional resources, learning goals) should have a major influence on the development of a community college's student assessment program. Respondents agreed that assessment of basic skills should be required of all students in two-year transfer programs and in vocational

programs. There was high agreement among respondents that student assessment should serve as a basis for advisement of students, but opinion was fairly evenly divided (mean of 3.18) as to whether student assessment should serve as a basis for mandatory course placement. There was high agreement that scores used for placement of students should be research based.

There was high agreement among the respondents (mean of 4.42) that no Florida resident with a high school diploma or a GED should be denied admission to a Florida community college as a result of assessment scores. There was agreement, though not as strong (mean of 3.76), that no student who has successfully completed the coursework for an associate degree should be denied the degree due to low exit assessment scores.

On the issue of who should assume the cost of assessing students (items 26, 27, and 28) more respondents felt that the state should assume the cost of assessing students, rather than the community college or the students. Respondents were least in favor of having students pay the cost of their assessments.

There was high agreement that the administration of assessment instruments should be during the admissions/ pre-registration period. The respondents also agreed that it is important to empirically validate assessment programs.

Item 31, "the open door does not contribute to a lowering of academic standards" resulted in a divided response, but one which was tilted toward agreement (mean of 3.39). The response to item 32, "if it becomes necessary to restrict college enrollment, persons with basic skill deficiencies should be the first to be denied admission," also resulted in a very divided response. Results indicated some strong opinions in both directions and consequently a mean of 3.06. Item 33, "Assessment programs tend to be discriminatory to minority students" again resulted in divided opinions and a mean of 2.85 which indicates slightly more disagreement than agreement. On each of these last two items, five respondents indicated "no opinion." On both items, the "no opinions" and the means close to 3.0 seem to indicate strong feelings one way or the other and not a genuinely "no opinion" stance.

Conclusions

Conclusions that can be drawn from the results of the Survey of Entering Student Assessment Procedures are that:

1. There is a great deal of variation among Florida community and junior colleges in their policies and procedures for assessing entering students.

2. The assessment of entering students to Florida community and junior colleges focuses on communication and computation skills.

3. Even though assessment in Florida community and junior colleges is focused on the areas of mathematical computation skills, reading comprehension, English usage, and English writing ability, rarely does a single college assess in all four areas.

4. The most common approach to assessing entering students appears to be assessment in groups at orientation or pre-registration.

5. High school grades and previous college coursework are often considered as part of entering student assessment.

6. Most Florida community and junior colleges have programs that are not open admission.

7. The selection criteria for selective admissions programs vary extensively.

8. The estimated assessment cost per student to the institution is usually less than $1.00.

9. Students usually must pay their own testing fees when a national standardized examination is required.

10. Study skills, career interest, and self-concept instruments are rarely routinely administered to all entering students to Florida community and junior colleges, although assessment in these areas is often available upon request.

11. Many different assessment instruments are used by Florida community and junior colleges to assess basic skills.

12. Standardized commercially available assessment instruments are used more often than campus-produced assessment

instruments in the areas of mathematical computation skills, reading comprehension, and English usage. Campus-produced instruments were more commonly used in assessing English writing skills.

13. Who selects assessment instruments varies from college to college.

14. Cost, ease of administration, availability, congruence with instructional goals, and predictability are all factors which are often considered in instrument selection.

15. Policies pertaining to who is assessed appear to have many variations between and among both subject areas and colleges.

16. The results of assessment instruments are used to make decisions about placing students in developmental courses.

17. In all four subject areas, scores on instruments are much more often used to advise students and suggest course placement than to require students to be placed in developmental courses.

18. Cut-off scores for developmental course placement are as likely to be rather arbitrary as they are to be research based.

19. The results of assessment instruments are seldom used for exemptions, honors courses, or credit by examination.

20. English language proficiency assessment for international students are the most common additional assessment

instruments used for basic skill assessment.

Conclusions that can be drawn from the results of the Entering Student Assessment Opinionnaire, are that coordinators of Florida community and junior college student assessment programs have the following opinions:

1. They agree that there should be an assessment program for entering students.

2. Their opinions are divided as to whether or not assessment instruments, practices, and policies should be standardized throughout the state; slightly more are against standardization than are for it.

3. They do not favor a standardized policy for the use of placement criteria and cut-off scores at all community colleges.

4. They perceive the assessment of entering students as beneficial in college program planning.

5. They perceive the primary purpose of assessment programs to be placement of students in courses appropriate to their skill level.

6. They perceive that assessment enhances retention of students; they perceive that assessment does not increase attrition or "no shows."

7. They agree that one of the purposes of student assessment is to help identify student strengths as well as weaknesses.

8. They tend to agree that assessment programs may also be an indicator of educational accountability.

9. They favor the active involvement of college faculties in deciding what their college's assessment programs will be.

10. There is a tendency to agree that students should be selected for limited enrollment programs based on assessment scores, but they tend to be against the use of assessment scores to select students for all courses.

11. They tend to agree that community college assessment should include personal characteristics in addition to cognitive skills.

12. They agree that assessment programs should consider previous coursework and grade point average.

13. They agree that community characteristics (such as student clientele, instructional resources, learning goals) should have a major influence on the development of a community college's student assessment program.

14. They agree that assessment of basic skills should be required of all students in two-year transfer programs and vocational programs.

15. They agree that student assessment should serve as a basis for advisement of students but are divided in their opinions as to whether or not student assessment should serve as a basis for mandatory course placement.

16. They agree that scores used for placement of students should be research based.

17. They strongly agree that no Florida resident with a high school diploma or a GED should be denied admission to a Florida community college as a result of assessment scores.

18. They tend to agree that no student who has successfully completed the coursework for an associate degree should be denied the degree due to low exit scores.

19. They agree that the state, rather than the community college or the student, should assume the cost of assessing students.

20. They agree that assessment instruments should be administered during the admissions/pre-registration period.

21. They agree that it is important to empirically validate assessment programs.

22. There is a tendency to agree that the "open door" does not contribute to a lowering of academic standards.

23. They are divided in their opinions as to whether or not persons with basic skill deficiencies should be the first to be denied admission if it becomes necessary to restrict college enrollment.

24. They have a slight tendency to think that assessment programs are not discriminatory to minority students.

Implications

The implications which can be derived from this study include the following:

1. Before any move toward state-wide standardization of student assessment programs, attitudes against centralization should be thoroughly explored.

2. Community and junior colleges need to examine their selection criteria for limited enrollment programs so as to ensure that their policies are not discriminatory in any way.

3. Community and junior college student assessment programs should be examined in light of their congruence with the community college open door philosophy.

4. Cut-off scores used for developmental course placement should be research based, and community and junior colleges need to empirically validate their assessment programs.

5. Community and junior college assessment should not be limited to testing. Assessment should include such factors as high school grades, previous college coursework, and student self-evaluation.

6. Community and junior college assessment programs should function in a manner that decreases attrition, and thus improves retention of students.

APPENDIX A

FLORIDA COMMUNITY/JUNIOR COLLEGE INTER-INSTITUTIONAL RESEARCH COUNCIL

UNIVERSITY OF FLORIDA

SURVEY OF ENTERING STUDENT ASSESSMENT PROCEDURES

Please type or print the following information. Information provided should reflect you college's policies and procedures as of fall term 1980. If your college has a policy statement or assessment procedures in writing, please attach a copy. It is important that you return this form by July 23.

NAME OF INSTITUTION (and campus if multi-campus) _____

NAME OF PERSON COMPLETING FORM _____

TITLE _____ DATE _____

PART A

1. Please check all subject areas in which first-time-in-college students are assessed:
   ( ) Reading comprehension
   ( ) English writing ability
   ( ) English usage
   ( ) Mathematical computation skills
   ( ) Science
   ( ) Other (specify) _____

Note: Completion of Part B of this survey is required for each subject area checked.

2. Please check the appropriate statement with regard to assessment instruments:
   ( ) All students take the same assessment instruments
   ( ) All students take a core instrument(s), plus additional instruments as determined by course selection
   ( ) Students take separate instruments as determined by course selection
   ( ) Other (specify) _____

3. How is assessment currently administered in your college: Check all groups that apply.
   ( ) In groups, at orientation
   ( ) Individually, during pre-registration advisement
   ( ) Individually, during registration
   ( ) Other (specify) _____

4. Indicate other factors besides the results of assessment instruments that are considered as part of first-time-in-college student assessment: Check all that apply.
   ( ) High school graduates
   ( ) Previous college coursework
   ( ) Student self-evaluation
   ( ) Other (specify) _____

5. Does your college have programs that are not open admission? If so, please specify which programs and the specific admissions criteria for each program. You may attach any preprinted statements that your college has available. _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

6. What is your estimated cost per student (to the institution) of your assessment program? Include only the purchase and scoring costs of assessment instruments. Do not include personnel costs. _____
   _____
   _____

7. Please indicate any assessment costs to students that are not reimbursed by your college. _____
   _____
   _____

8. Check additional areas in which first-time-in-college students are assessed:
   ( ) Study skills
   Name of assessment instrument _____
   _____

   Is this assessment mandatory? _____

( ) Career interest
Name of assessment instrument _____
_____

Is this assessment mandatory? _____

( ) Self concept
Name of assessment instrument _____
_____

Is this assessment mandatory? _____

9. Please add any comments that would increase the completeness of the description of your assessment program. _____
_____
_____
_____
_____
_____
_____

PART B

IMPORTANT DIRECTIONS: PART B refers back to the subject areas checked in question # 1 of PART A. If your college has a uniform procedure for all subject areas assessed, one PART B may be used to answer all subject areas simultaneously. Otherwise, use additional PART B forms to indicate procedure differences between subject areas.

NAME OF SUBJECT AREA ASSESSED: _____

1. An assessment instrument in this subject area is administered to the following student groups: Check all that apply.
   ( ) First-time-in-college students
   ( ) Returning students
   ( ) Students transferring from another college

   ( ) Advanced and professional students
   ( ) Occupational students
   ( ) Students with other personal objectives

   ( ) Full-time students
   ( ) Part-time students

   ( ) Concurrent high school/college enrollees
   ( ) Early college admits (academically superior students)
   ( ) International students
   ( ) Non high school graduates

2. Name the primary instrument that is currently being used for assessment in the subject area above. _____

3. This instrument is:
   ( ) A campus-produced test
   ( ) In print, standardized and available nationally
   ( ) Other (specify) _____

4. Explain by whom (by title or committee) this instrument was selected as an appropriate assessment tool for this area _____

5. This instrument was selected because of the following factors: Check all that apply.
   ( ) Cost
   ( ) Ease of administration
   ( ) Availability
   ( ) Congruence with instructional goals
   ( ) Predictability
   ( ) Other (specify) _____

6. Are the results of this assessment instrument used to make decisions about placing students in developmental/ remedial courses?
   ( ) No
   ( ) Yes, one or more developmental courses
   ( ) Yes, a developmental block of courses

7. Placement of students in developmental/remedial courses based on the results of this test is:
   ( ) Required
   ( ) Strongly urged
   ( ) Voluntary

8. What is the cut-off score used for placement of students in developmental/remedial courses? _____

   This score is:
   ( ) Raw score
   ( ) Scale score
   ( ) Percentile score

9. Explain how this cut-off score was determined. _____

10. Are the results of this assessment instrument used for exemptions, honors courses, credit by examination or other such purposes? If so, please specify what cut-off scores, on what instruments, and for what purposes.

11. Name any secondary instruments that are currently being used for assessment in the subject area above. For example, include instruments used with students who speak English as a second language. _____

12. Additional comments: _____

APPENDIX B

ENTERING STUDENT ASSESSMENT OPINIONNAIRE

FLORIDA COMMUNITY JUNIOR COLLEGE INTER-INSTITUTIONAL RESEARCH COUNCIL

UNIVERSITY OF FLORIDA

The purpose of this opinionnaire is to determine the opinions of faculty and administrators who coordinate the assessment programs for entering community college students.

NAME OF INSTITUTION (and campus if multi-campus) _____

NAME OF PERSON COMPLETING FORM _____

Instructions:

A. Please put your name on the opinionnaire and answer sheet.

B. Answer each item.

C. Please use the answer sheet for recording your responses.

D. Blacken in your responses on the answer sheet with a black lead pencil only (No. 2½ or softer).

E. Make heavy black marks that completely fill the circle.

F. Erase cleanly any answer you wish to change - make no stray marks on the answer sheet.

Blacken the appropriate circle on the answer sheet for the following items.

1. What is your position with the community college?
   (1) full-time faculty member
   (2) instructor with additional administrative responsibilities
   (3) full-time administrator
   (4) professional staff

2. How involved are you in the assessment program for entering students at your college?
   (1) no involvement
   (2) minimal involvement
   (3) participant
   (4) coordinator
   (5) major responsibility at college

Blacken the appropriate circle on the answer sheet for the following items by using the scale:

1 -- Strongly Disagree 2 -- Disagree 3 -- No Opinion

4 -- Agree 5 -- Agree

3. All Florida community colleges should have an assessment program for entering students.

4. Assessment instruments, practices, and policies should be standardized throughout the state.

5. All Florida community colleges should be required to use the same placement criteria and "cut-off" scores.

6. Assessment of entering students is beneficial in college program planning.

7. The primary purpose of assessment programs is placement of students in courses appropriate to their skill level.

8. Assessment enhances retention.

9. Assessment increases attrition.

10. Assessment increases "no shows".

11. One of the purposes of student assessment is to help identify student strengths as well as weaknesses.

12. Assessment programs may also be an indicator of educational accountability.

13. Community college faculties should be actively involved in deciding what their college's assessment program will be.

14. Students should be selected for all programs based on assessment scores.

15. Students should be selected for limited enrollment programs based on assessment scores.

16. Community college assessment should include personal characteristics (such as motivation) in addition to cognitive skills.

17. Student assessment programs should consider previous coursework and grade point averages.

18. Community characteristics (such as student clientele, instructional resources, learning goals) should have a major influence on the development of a community college's student assessment program.

19. Assessment of basic skills should be required of all students in two-year transfer programs.

20. Assessment of basic skills should be required of all students in vocational programs.

21. Student assessment should serve as a basis for advisement of students.

22. Student assessment should serve as a basis for mandatory course placement.

23. Scores used for placement of students should be research based.

24. No Florida resident with a high school diploma or a GED should be denied admission to a Florida community college as a result of assessment scores.

25. No student who has successfully completed the coursework for an associate degree should be denied the degree due to low exit assessment scores.

26. Students should pay the cost of their assessments.

27. The community college should absorb the cost of assessing students.

28. The state should assume the cost of assessing students.

29. Assessment instruments should be administered during the admissions/pre-registration period.

30. It is important to empirically validate assessment programs.

31. The "open door" does not contribute to a lowering of academic standards.

32. If it becomes necessary to restrict college enrollment, persons with basic skill deficiencies should be the first to be denied admission.

33. Assessment programs tend to be discriminatory to minority students.

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AUG 12 1983